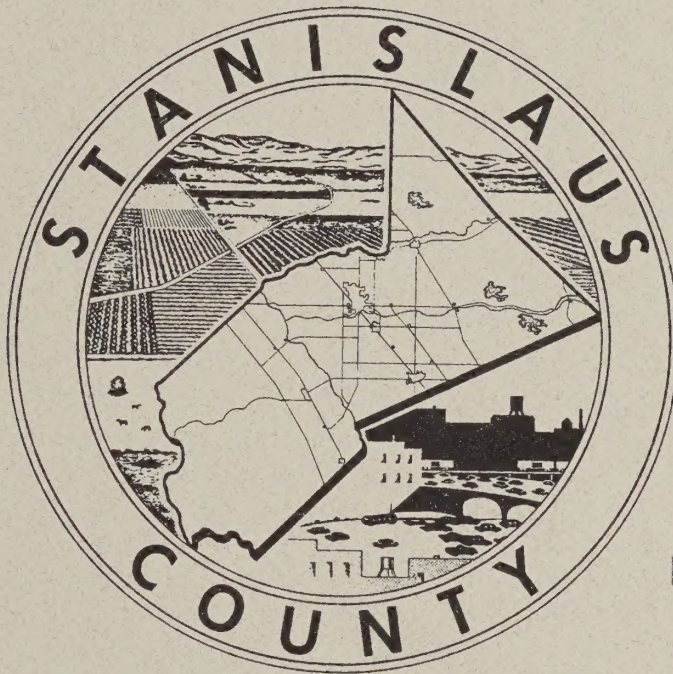


Stanislaus County

AGRICULTURAL ELEMENT OF THE GENERAL PLAN



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Adopted April 1992

**AGRICULTURAL ELEMENT
OF THE
STANISLAUS COUNTY GENERAL PLAN**

**Adopted by the Stanislaus County
Board of Supervisors
April 23, 1992**

*This document was produced by the
Stanislaus County Department of
Planning and Community Development*

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ACKNOWLEDGMENTS

Many people deserve recognition for their help in developing an agricultural element of the Stanislaus County General Plan. Among those who have contributed are local farmers and ranchers; elected officials, appointees and the staffs of local, state and federal agencies; and many other members of the community who are concerned about the future of agriculture in Stanislaus County.

Special recognition should be given to the Agricultural Element Committee, which produced the original Draft Agricultural Element in 1990, and the General Plan Update Committee, which developed the second draft document.

Members of the following agencies and organizations also have made significant contributions to the development of an agricultural element of the Stanislaus County General Plan:

Stanislaus County Farm Bureau

California Women for Agriculture

American Farmland Trust

Ecology Action

Modesto League of Women Voters

Stanislaus County Department of Agriculture

U.C. Cooperative Extension

"From the beginning, agriculture has been the lifeblood of Stanislaus County. It has provided the jobs, attracted the industry, and given the impetus to enable the local economy to grow and prosper. [Today] Stanislaus County, like other areas in the Nation, is feeling increasing pressure on its agricultural economic base. There are more people demanding more land, more food, and more services...."

Stanislaus Area Association of Governments,
Stanislaus Area Environmental Resources Management Element, Agriculture:
Data Report, 1976.

PREFACE

Agriculture is the leading industry in Stanislaus County. Gross agricultural income in Stanislaus County in 1990 exceeded one billion dollars for an all-time high of \$1,038,356,000. When multiplied by its effect on food processing, marketing and related services, agriculture in 1990 contributed well over \$3.25 billion to our local economy. Located in the Central Valley, which has long been known as California's agricultural heartland, Stanislaus County consistently ranks among the top ten agricultural counties in the state. Stanislaus County also plays a major role in agriculture at the national level and currently ranks seventh in the nation, based on market value of agricultural products sold.

The success of agriculture in Stanislaus County is largely due to our favorable climate and the flat, fertile soils that comprise the resource base of our biggest industry. The availability of affordable, high quality irrigation water and low-cost electrical power also has helped give local agriculture a competitive advantage.

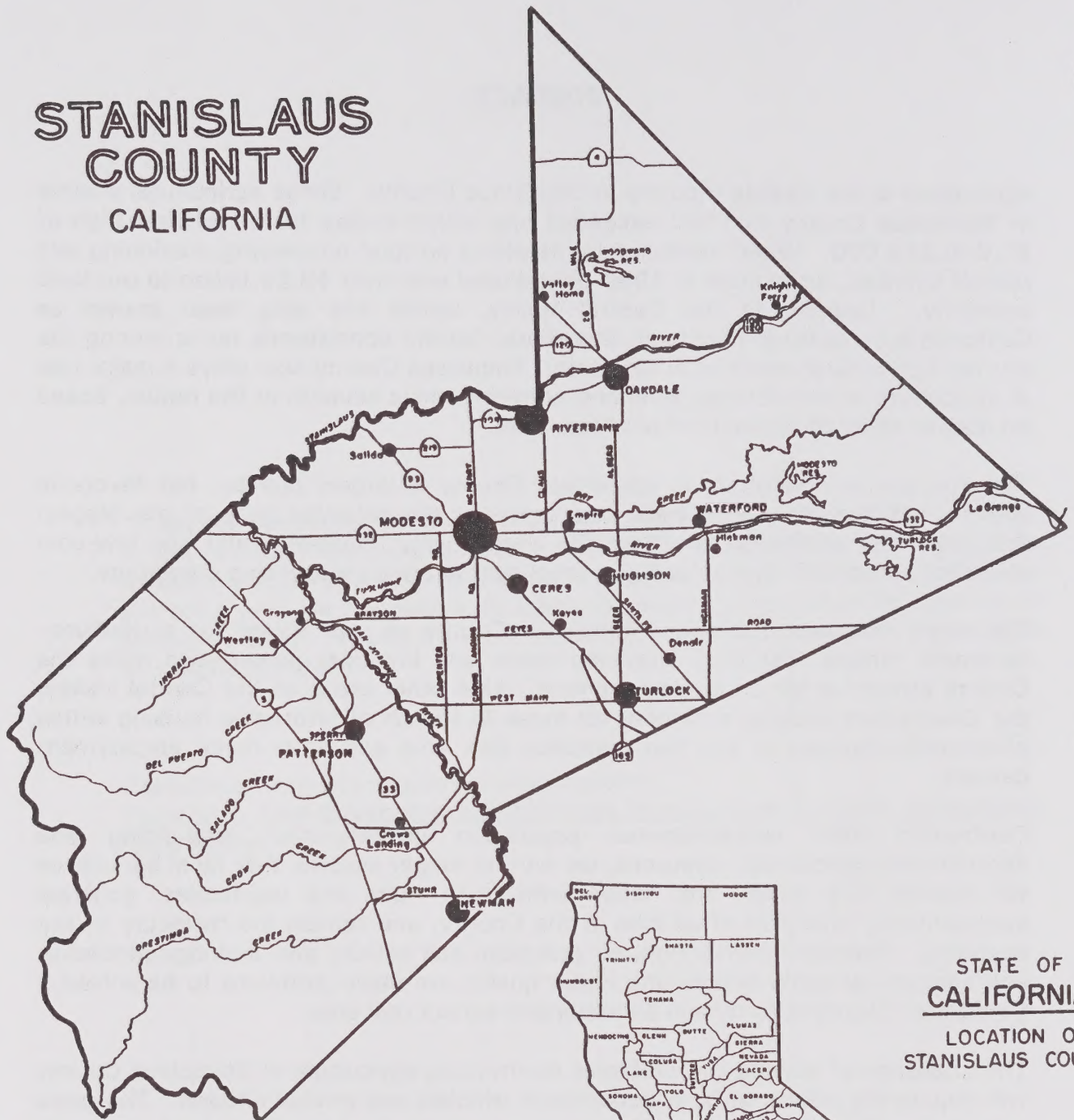
The same elements that make Stanislaus County so well suited for agriculture--favorable climate, flat land, available water and low-cost power--also make the County attractive for urban development. Like other areas of the Central Valley, the County has become a magnet for those in search of affordable housing within commuting distance of the San Francisco Bay Area and other major employment centers.

Confronted with unprecedented population growth and diminishing and deteriorating agricultural resources, we can no longer assume that local agriculture will always help supply the nation with fresh fruits and vegetables, generate approximately one-third of all jobs in the County, and remain the mainstay of our economy. Farmland conversion, air pollution, soil salinity and drainage problems, and agricultural water supply and water quality are major problems to be solved if Stanislaus County is to remain an important agricultural area.

The challenge of solving the problems confronting agriculture in Stanislaus County will require the efforts of both government officials and private citizens. The goals to sustain a healthy agricultural economy, preserve our agricultural land, conserve our water and improve our air quality are goals for which we all can strive, from which we all will benefit.

STANISLAUS COUNTY

CALIFORNIA



STATE OF
CALIFORNIA
LOCATION OF
STANISLAUS COUNTY

INTRODUCTION

Authority

In recognition of the importance of agriculture to our local economy, the Stanislaus County General Plan includes a commitment to prepare an agricultural element to promote and protect local agriculture. Under Section 65303 of the California Government Code, agricultural elements are authorized but not mandated by the state legislature. The policies in this document have the same legal status as any state-mandated element of the general plan.

Background

In 1988 the County appointed a broad-based citizens advisory committee called the Agricultural Element Committee to identify issues, formulate goals and policies, and generally direct the development of an agricultural element. After 39 meetings in a 15-month period, the committee generated a draft document for public review. The committee then produced a slide presentation and held a series of 19 public meetings to introduce the Draft Agricultural Element to interested groups in the community.

Following its publication in February 1990, the Draft Agricultural Element was widely distributed for public review and comment. Approximately 850 copies were distributed to public agencies, private organizations and interested individuals; 26 written comments were received in response.

By far the most extensive analysis of the draft document was made by the Stanislaus County Farm Bureau, which established its own committee to study the proposed addition to the General Plan. Farm Bureau presented its comments to the County in December 1990. In January 1991 the County established a General Plan Update Committee, which was assigned to review all comments and revise the agricultural element. This second draft is the product of that effort.

Purpose

The purpose of the Agricultural Element is to promote and protect local agriculture through the adoption of policies designed to achieve three main goals:

1. Strengthen the agricultural sector of our economy.

2. Preserve our agricultural lands for agricultural uses.
3. Protect the natural resources that sustain agriculture in Stanislaus County.

The policies are intended to provide clear guidelines for County decision-making. The policies also are intended to express the County's commitment to specific programs and strategies that will ensure the continued success of our agricultural industries and productivity of our agricultural lands.

Focus

The overall focus of the Agricultural Element is on the mitigation of economic and environmental impacts resulting from the conversion of productive agricultural lands and the deterioration of air, soil and water resources that support local agriculture. Since agriculture itself also can have adverse impacts, additional measures are established to minimize the environmental impacts of agriculture and the conflicts that arise over agricultural practices. By minimizing the impacts of urbanization on agriculture as well as the impacts of agriculture on the environment, the County will help protect local agriculture and ensure its continued success.

Scope

This document represents a broad-based effort by many members of the community to analyze the present status of local agriculture, address agricultural issues, consolidate existing County policies and propose new strategies to solve problems that exist. Not limited to land use issues, this document goes beyond the scope of most agricultural elements to include strategies for economic development and resource protection related to agriculture. Because of its comprehensive approach, this document can be considered a strategic plan for agriculture in Stanislaus County.

Relationship to Other Elements

The Agricultural Element is coordinated with several other elements of the General Plan. It interacts primarily with agriculture-related policies of the Land Use, Conservation/Open Space, and Housing Elements. To avoid duplication, policies in these elements that affect or relate to agriculture are not repeated in this element. However, such policies are cross-referenced whenever appropriate.

THE ECONOMICS OF AGRICULTURE

Agriculture is the leading industry in Stanislaus County. In 1990, gross agricultural income in Stanislaus County totalled \$1,038,356,000. When multiplied by its effect on food processing, marketing and related services, agriculture contributed well over \$3.25 billion in 1990 to our local economy. Consistently ranking among the top ten agricultural counties in California and currently seventh in the nation, Stanislaus County agriculture also is important to our state and national economies.

Agriculture in Stanislaus County is characterized by a broad diversity of commodities, including many specialty crops that are grown almost exclusively in this area. As shown in Table 1, the ten leading commodities for 1990 in Stanislaus County were milk, chickens, almonds, cattle and calves, eggs, tomatoes, turkeys, walnuts, peaches and grapes. Six of those products are grown almost exclusively in California, with Stanislaus County contributing a significant percentage of the state's overall production. The County ranked first in California in 1990 production of casaba, crenshaw and honeydew melons, apricots and dry beans, and the Stanislaus County almond crop ranked as the second largest in the state.

As noted in the support document of the General Plan, the initial value of farm production has a ripple, or multiplier, effect in the economy by generating related activities such as food processing, retail and wholesale trade, and transportation. Table 2 shows that multiplier effects for the County's leading commodities in 1990 ranged from 1.8 for cattle and calves to 10.8 for tomatoes. The overall multiplier effect for the County is 3.2 for a total economic impact of \$3,322,739,200.

A 1984 study by the University of California indicated that about 1/3 of the jobs in Stanislaus County were generated directly or indirectly by agriculture (see Table A-1 in Appendix A). The Stanislaus County Economic Strategic Plan documents that all but one of the 11 largest firms in the County in 1986 were categorized in the "Food and Kindred Products" industry group by the U.S. Department of Commerce.

In overall production trends, the County's product value has continued to grow to a high of more than one billion dollars in 1990 despite market fluctuations and five consecutive years of drought.

For additional agricultural data, see Appendix A.

TABLE 1

STANISLAUS COUNTY 20 LEADING COMMODITIES
(GROSS AGRICULTURAL VALUE)

<u>1990</u> <u>Rank</u>	<u>Commodity</u>	<u>Value</u>	<u>1989</u> <u>Rank</u>
1	Milk, All	\$ 268,261,000	1
2	Chickens, All	125,564,000	2
3	Almond Meats	109,908,000	3
4	Cattle & Calves, All	62,334,000	4
5	Chicken Eggs, All	51,236,000	5
6	Tomatoes, All	47,782,000	6
7	Turkeys, All	40,825,000	9
8	Walnuts, Inshell	39,289,000	8
9	Peaches, All	33,924,000	7
10	Grapes, Crushed, All	29,813,000	11
11	Alfalfa	27,984,000	12
12	Beans, Dry, All	26,511,000	10
13	Silage, All	25,202,000	14
14	Apricots	16,920,000	15
15	Nursery (Fruits & Nut Trees & Vines)	12,246,000	16
16	Melons, All	12,109,000	13
17	Pasture, Irrigated	11,250,000	17
18	Beans, Green Lima	10,000,000	18
19	Almond Hulls	8,960,000	19
20	Rangeland	5,744,000	20

SOURCE: Stanislaus County Annual Crop Report,
 Department of Agriculture, 1990

TABLE 2

**STANISLAUS COUNTY LEADING COMMODITIES
WITH 1990 ECONOMIC MULTIPLIERS**

<u>Commodity</u>	<u>1990 Value</u>	<u>Multiplier</u>	<u>Economic Benefit Commodity Generates In County</u>
Milk, All	\$ 268,261,000	2.3	\$617,000,000
Chickens, All	125,564,000	2.8	375,840,000
Almond Meats	109,908,000	2.5	274,770,000
Cattle & Calves, All	62,334,000	1.8	112,201,000
Chicken Eggs, All	51,236,000	2.8	143,460,000
Tomatoes, All	47,782,000	10.8	516,045,000
Turkeys, All	40,825,000	2.8	114,310,000
Walnuts, Inshell	39,289,000	3.2	125,725,000
Peaches, All	33,924,000	6.0	203,544,000
Grapes, Crushed, All	29,813,000	7.8	232,541,000
Alfalfa	27,984,000	2.4	67,162,000
Beans, Dry, All	26,511,000	2.4	63,626,000
Silage, All	25,202,000	2.4	60,484,000
Apricots	16,920,000	2.4	40,608,000
Nursery (Fruits & Nut Trees & Vine)	12,246,000	2.9	35,513,000
Melons, All	12,109,000	3.0	36,327,000
Pasture, Irrigated	11,250,000	2.4	27,000,000
Beans, Green Lima	10,000,000	6.5	65,000,000
Almond Hulls	8,960,000	2.4	21,504,000
Rangeland	5,744,000	2.4	13,786,000

SOURCE: University of California Cooperative Extension, 1991.

All Commodities	\$1,038,356,000	3.2	\$3,322,739,200
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GOAL ONE

STRENGTHEN THE AGRICULTURAL SECTOR OF OUR ECONOMY.

California is the top-ranked agricultural state in the United States. Stanislaus County, with a gross agricultural income of more than one billion dollars, ranked seventh among California counties in 1990. On the national level, Stanislaus County also ranked seventh among all counties in the 1987 Census of Agriculture, which is the most recent ranking of counties nationwide based on market value of agricultural products sold.

In addition to playing a major role in our state and national economies, agriculture is the leading industry in Stanislaus County. Its total contribution to our local economy extends far beyond the sale of farm products. As farmers, manufacturers, local businesses, households, transportation companies and government agencies purchase goods and services from each other, each dollar of farm income circulates through the community many times, making a multiplier effect on the economy. As a result, \$1,038,356,000 in gross agricultural income actually contributed about \$3,322,739,200 to our economy in 1990.

Growth in Stanislaus County is both an opportunity for local agriculture and a threat to its stability. There are opportunities to expand markets for local agricultural products and opportunities for the expansion of existing businesses and the formation of new enterprises. However, growth can also result in increased conflicts between farm and non-farm residents as well as contributing to the loss of productive farmland, the deterioration of air quality, increased competition for water supplies and other resource problems.

Some of these opportunities and threats are addressed in the following section of this document, and strategies for agriculture-related economic development are presented. These strategies include ways to improve marketing and promotion, finance capital improvements, provide education and technical assistance, minimize conflicts between farm and non-farm residents, provide adequate housing for farm workers, and ensure food safety.

Because many of these issues are not unique to Stanislaus County alone, but involve the entire Central Valley, the close cooperation of local governments through a voluntary regional association or confederation is essential for the continued success of agriculture and the health of our regional economy as a whole.

MARKETING AND PROMOTION

Policies

- 1.1 Efforts to promote the location of new agriculture-related business and industry in Stanislaus County shall be supported.
- 1.2 The marketing and promotion of local agricultural products shall be encouraged.
- 1.3 Efforts to expand foreign markets for the export of local agricultural products shall be encouraged.

Background

Stanislaus County currently plays an active role in economic development through its participation in the Stanislaus County Economic Development Corporation (SCEDCO). SCEDCO is a private, non-profit corporation comprised of representatives from each of the nine cities and Chambers of Commerce in Stanislaus County, the Private Industry Council, and the County Board of Supervisors.

SCEDCO promotes the location of new industry in Stanislaus County through national advertising, participation in trade shows such as the annual food and dairy show in Chicago, and other similar activities. Food processing industries are targeted as potential newcomers to this area. SCEDCO also offers a variety of services to the small business community, including assistance with market analysis and strategies, financial analysis, and business plan development.

In addition to its participation in SCEDCO, the County can support efforts to market produce directly to the customer from the farmer, to attract new customers, and to promote local farm products through publications such as the Farm Bureau's Central Valley Harvest Trails.

The County also can support efforts to create a market identity for Stanislaus County. For example, Monterey County helped fund a project sponsored by the local Farm Bureau to develop brochures, posters and a traveling exhibit to promote local agriculture and tourism. Similarly, Sonoma County has encouraged the design of an agricultural logo that can be used on all agricultural products or their packaging to identify the product as coming from Sonoma County.

A strong export market for Stanislaus County agricultural products already exists. Each year an increasing amount of almonds, walnuts, pears, beans, nursery stock and seeds are shipped to more than 70 different countries. SCEDCO will work closely with companies interested in exporting local agricultural products. In addition, the County can encourage the state to expand its Agricultural Export Program through the California Department of Food and Agriculture.

Similarly, the County could urge the state to expand Rural Renaissance Program funds to include agricultural product research, market and food processing analysis, or other agriculture-related activities.

The establishment of an international trade center in Stanislaus County also has been proposed as a means of promoting the export of local agricultural products.

Implementation

- A. The County will continue to participate in SCEDCO, which provides a variety of marketing and promotion services to the business community. The County also will continue to encourage SCEDCO to target agriculture-related business and industry for location in Stanislaus County.
- B. The County will urge the State Legislature to provide more funding for the Agricultural Export Program (California Department of Food and Agriculture) which seeks to expand foreign markets for several commodities produced in Stanislaus County.
- C. The County will urge the State Legislature to expand Rural Renaissance Program funds to include agriculture-related activities such as market and product development analysis.

Responsible Agencies

- 1. Continue to participate in SCEDCO and encourage its efforts to bring new agriculture-related industry to Stanislaus County--Board of Supervisors
- 2. Urge the State Legislature to expand the Agricultural Export Program and the Rural Renaissance Program--Board of Supervisors, Agricultural Commissioner
- 3. Encourage efforts to establish direct marketing programs and a market identity for Stanislaus County--Board of Supervisors, Agricultural Commissioner

AGRICULTURE-RELATED USES

Policies

- 1.4 Direct-marketing stands shall be permissible in agricultural areas.
- 1.5 Limited visitor-serving commercial uses shall be permissible in agricultural areas if they promote agriculture and are secondary and incidental to the area's agricultural production.
- 1.6 Agricultural service establishments shall be permissible in agricultural areas if they are designed to serve the immediately surrounding area as opposed to having a widespread service area, and if they will not be detrimental to agricultural use of other property in the vicinity.
- 1.7 Processing facilities and storage facilities for agricultural products either grown or processed on the site shall be permissible in agricultural areas.
- 1.8 Concentrations of commercial and industrial uses, even if related to surrounding agricultural activities, are detrimental to the primary use of the land for agriculture and shall not be allowed.
- 1.9 To encourage vertical integration of agriculture, the County shall allow research, production, processing, distribution, marketing, and wholesale and limited retail sales of agricultural products in agricultural areas, provided such uses do not interfere with existing agricultural operations.

Background

Given its broad diversity, Stanislaus County agriculture involves a variety of commercial activities and requires a range of supplies and services. Roadside stands, processing services, maintenance and repair of farm machinery and equipment, custom farming services and similar agriculture-related uses are all important for the success of agriculture.

Some of these commercial activities and support services may be most appropriately located on agricultural lands, where they are convenient and accessible to farmers and ranchers. On the other hand, some of these uses may interfere with agricultural operations. The determination of which commercial activities and support services belong on agricultural lands depends on their connection to agriculture, the potential for conflicts, the size, scale and adaptability of the use, and the amount of land lost to farming.

Visitor-serving commercial uses can be especially problematic. Direct marketing and promotion of local products is beneficial to the agricultural industry, yet the people who come to enjoy the rural setting and recreational facilities may interfere with necessary farming practices. This "people versus practices" conflict makes it necessary to limit the location and intensity of visitor-serving commercial uses in agricultural areas.

Under existing A-2 zoning regulations, seasonal wayside stands for direct marketing of agricultural produce are permitted outright if they meet standards for parking and signs. Other agriculture-related uses such as alfalfa and feed dehydrators, nut hulling and drying, wholesale nurseries, and warehouses for storage of grain and other farm produce are conditional uses requiring a use permit.

Agricultural service establishments designed to serve the immediate area and agricultural processing plants such as wineries and canneries are allowed when the Planning Commission finds that (1) they will not be substantially detrimental to or in conflict with the agricultural use of other property in the vicinity; (2) the establishment as proposed will not create a concentration of commercial and industrial uses in the vicinity; and (3) it is necessary and desirable for such establishment to be located within the agricultural area as opposed to areas zoned for commercial or industrial use. Limited visitor-serving commercial uses including retail sales, tasting rooms and/or facilities for on-site consumption of agricultural products are allowed in conjunction with agricultural processing facilities.

Implementation

The County will continue to implement its existing General Agriculture (A-2) zoning provisions for agriculture-related commercial and industrial uses, which are consistent with these policies.

Responsible Agencies

Continue to implement existing zoning provisions for agriculture-related commercial and industrial uses--Planning Department, Planning Commission, Board of Supervisors

MINIMIZING AGRICULTURAL CONFLICTS

Policies

- 1.10 The County shall continue to implement its Right-to-Farm Ordinance.
- 1.11 The County shall protect agricultural operations from conflicts with non-agricultural uses by requiring buffers between proposed non-agricultural uses and adjacent agricultural operations.
- 1.12 Setbacks from agricultural areas shall be established to minimize adverse impacts of adjacent uses on agriculture.

Background

Urbanization and the proliferation of rural residences throughout the County has led to increased conflicts over agricultural operations. Homeowners complain about noise, odors, flies, chemical spraying and similar impacts of commercial agricultural practices; farmers complain about vandalism, theft and trespass on farm properties. To minimize these conflicts, the County can use the following mitigation measures: continuing to implement its right-to-farm ordinance, requiring buffers between non-agricultural development and adjacent agricultural operations, and establishing setbacks from agricultural zones.

Stanislaus County is one of 19 counties in California to have enacted a local right-to-farm ordinance to protect farmers from nuisance suits as a result of normal farming practices. In 1991 the County strengthened its original right-to-farm ordinance by amending it to require disclosure to home buyers in farming areas that they are subject to noise, dust, odors, and other impacts of commercial agricultural operations. The County also established a notification system to make residents more aware of the right-to-farm policy and established a voluntary agricultural grievance procedure as an alternative to court proceedings.

To mitigate the impacts of development by minimizing conflicts between agricultural and non-agricultural uses, buffers can be required when new non-agricultural development is approved in agricultural areas. A buffer is a physical separation such as a topographic feature, a substantial stand of trees, a water course, a landscaped berm or similar feature. Appropriate land uses for buffers include compatible agriculture, public recreation such as parks and golf courses, industrial uses and cemeteries. By separating incompatible uses, a buffer minimizes the impacts of development on surrounding agricultural operations and decreases the likelihood of conflict.

Similarly, the setbacks from agricultural zones also help minimize conflicts over agricultural practices. The zoning ordinance could be amended to require setbacks from agricultural zones. For example, standards for the Rural Residential District (R-A) can be amended to require all structures to be located at least 100 feet from an adjacent General Agriculture (A-2) zone.

Implementation

The County will use the following measures to mitigate the impacts of development by minimizing agricultural conflicts:

- A. Continue to implement the County's right-to-farm ordinance, which requires disclosure to home buyers in agricultural areas and notification of the right-to-farm policy, and establishes a voluntary grievance procedure as an alternative to court proceedings.
- B. Develop and implement guidelines for design and maintenance of buffers to be required when new non-agricultural uses are approved in agricultural areas. Buffer design and maintenance guidelines shall include, but not be limited to, the following:
 - 1) Buffers shall be physically and biologically designed to avoid conflicts between agriculture and non-agricultural uses.
 - 2) Buffers shall be located on the parcel for which a permit is sought and shall protect the maximum amount of farmable land.
 - 3) Buffers generally shall consist of a physical separation between agricultural and non-agricultural uses. The appropriate width shall be determined on a site-by-site basis taking into account the type of existing agricultural uses, the nature of the proposed development, the natural features of the site, and any other factors that affect the specific situation.
 - 4) Appropriate types of land uses for buffers include compatible agriculture, open space and recreational uses such as parks and golf courses, industrial uses, and cemeteries.
 - 5) The County may condition its approval of a project on the ongoing maintenance of buffers.
 - 6) A homeowners association or other appropriate entity shall be required to maintain buffers to control litter, fire hazards, pests, and other maintenance problems.

7) Buffer restrictions may be removed if agricultural uses on all adjacent parcels have permanently ceased.

C. Amend the zoning ordinance to establish setbacks from agricultural uses. For example, amend provisions for the Rural Residential District (R-A) to require a 100-foot setback from adjacent land zoned General Agriculture (A-2).

Responsible Agencies

1. Continue to implement right-to-farm ordinance--Tax Collector, Recorder/Clerk, Building Division, Planning Department, Planning Commission, Agricultural Grievance Committee, Board of Supervisors
2. Require buffers between non-agricultural uses and adjacent agricultural operations; develop and implement buffer guidelines--Planning Department, Planning Commission, Board of Supervisors
3. Establish setbacks from agricultural areas--Planning Department, Planning Commission, Board of Supervisors
4. Investigate complaints regarding odors, flies, use of pesticides and similar problems related to agricultural activities--Department of Environmental Resources, Agricultural Commissioner

HOUSING FOR FARM WORKERS

Policies

- 1.13 To help provide a stable work force for agriculture, the County shall continue to facilitate efforts of individuals, private organizations and public agencies to provide safe and adequate housing for farm workers.
- 1.14 Temporary farm labor camps shall be permissible in connection with any agricultural work or place where agricultural work is being performed.
- 1.15 Permanent, new housing for seasonal farm workers preferably shall be located in areas supplied with sewer and water services.
- 1.16 Housing for year-round, full-time farm employees shall be permissible in addition to the number of dwellings normally allowed by the density standard.

Background

Efficient farm management requires a stable work force to provide labor when needed. To ensure the availability of that labor, adequate numbers of employees must be housed on both a temporary and a permanent basis. Farmworker housing issues involve the location, amount and type of housing for seasonal and year-round farm workers.

State and federal housing programs for farm workers in Stanislaus County are administered by the Stanislaus County Housing Authority, which is an independent public agency entirely separate from County government. Farmworker housing projects currently administered by the Housing Authority include 356 year-round units constructed under the Farmers Home Administration and 212 seasonal units constructed under the Migrant Program funded by the state. These units are located throughout the County.

At present, other efforts to provide farmworker housing come mainly from individual farmers. The Stanislaus County Department of Environmental Resources, which enforces state regulations of farmworker housing, reports an increasing number of permit applications. At the same time, there is a growing need for farmworker housing, especially on a temporary, seasonal basis. More than 400 applicants are currently on the Housing Authority's waiting list for low-rent housing for farm workers.

The County appoints the Housing Authority Board, which is the agency's policy-making body, and otherwise assists the Housing Authority as outlined in a cooperative agreement. The Housing Element of the General Plan includes a commitment that the County shall continue to assist the Housing Authority in its administration of state and federal housing programs for farm workers.

Existing A-2 zoning allows farm labor camps and permanent housing for persons employed on a full-time basis in connection with the agricultural use of the property or other property owned or leased by the same owner. Guidelines and standards for farm-employee housing are included. Mobile homes are preferred over standard housing because they can be moved off the property if circumstances change and the employees are no longer needed.

Implementation

- A. As stated in the Housing Element, the County shall continue to assist the Stanislaus County Housing Authority in its administration of state and federal housing programs for farm workers. The County also shall facilitate the efforts of other public agencies, private organizations and individuals to provide safe and adequate housing for farm workers.
- B. The County shall continue to implement existing A-2 zoning provisions for farmworker housing, which already are consistent with these policies.
- C. The Stanislaus County Department of Environmental Resources shall continue to enforce the California Code of Regulations, Title 25, Subchapter 3, on Employee Housing Regulations.
- D. The County shall consider adoption of an expedited permitting procedure for construction of temporary farmworker housing similar to Ordinance No. 4166 adopted by Sonoma County.

Responsible Agencies

- 1. Continue to assist the Stanislaus County Housing Authority in its administration of state and federal housing programs for farm workers-- Planning Department, Board of Supervisors
- 2. Continue to implement zoning provisions that allow farmworker housing in agricultural areas--Planning Department, Planning Commission, Board of Supervisors

3. Continue to enforce state regulations regarding farmworker housing--
Department of Environmental Resources
4. Consider adoption of expedited permitting procedure for construction of
temporary farmworker housing--Department of Environmental Resources,
Planning Department, Planning Commission, Board of Supervisors

FINANCING CAPITAL IMPROVEMENTS

Policies

- 1.17 The County shall study the feasibility of establishing an Agricultural Development Authority to help farmers finance capital improvements.
- 1.18 The State Legislature shall be urged to allow counties to designate Agriculture Enterprise Zones for infrastructure and service improvements related to agriculture.

Background

One of the main obstacles to promoting agricultural development and maintaining a competitive edge for agriculture in Stanislaus County is a lack of capital for improvements in farm infrastructure. Much of the County's farm and food processing infrastructure was built in the 1940s and '50s and now needs to be modernized or rebuilt, including improvements to farm drainage systems, food processing wastewater treatment facilities, and other capital investments.

The Stanislaus County Economic Strategic Plan recommends the establishment of an Agricultural Development Authority to provide low-interest financing to farmers, ranchers and agricultural processors for capital expenditures necessary for agricultural production. The County's program could be modeled after the Colorado Agricultural Development Authority (CADA) which was established by the State Legislature 1981 to help combat the problem of high interest rates facing the agricultural sector. To date, the CADA has issued over \$15 million in tax-exempt bonds to assist over 150 agricultural producers with new capital expenditures. State legislation authorizing the establishment of an Agricultural Development Authority may be required before Stanislaus County can establish a similar program here.

The Enterprise Zone Program of the California Department of Commerce was established to promote the location of new businesses or improve existing businesses, hire the local unemployed, and promote business investment within designated areas of cities. The state could modify the program to allow counties to designate Agriculture Enterprise Zones for infrastructure and service improvements related to agriculture. Public grant monies and farm property tax revenues for agricultural development and conservation programs could be designated for use within the agriculture enterprise zones.

Implementation

- A. The County will study the feasibility of establishing an Agricultural Development Authority as recommended in the Economic Strategic Plan. The new entity would have the power to issue bonds and to participate with commercial lending institutions.
- B. The Board of Supervisors will urge the State Legislature to allow counties to designate Agriculture Enterprise Zones for infrastructure and service improvements related to agriculture.

Responsible Agencies

- 1. Study the feasibility of establishing an Agricultural Development Authority--Agricultural Advisory Board, Board of Supervisors
- 2. Urge the State Legislature to allow counties to designate Agriculture Enterprise Zones--Board of Supervisors

EDUCATION AND TECHNICAL ASSISTANCE

Policies

- 1.19 Public education institutions shall be encouraged to provide more technical assistance related to agricultural economic development in Stanislaus County.
- 1.20 The County shall continue to encourage vocational agriculture programs in local high schools and at Modesto Junior College.
- 1.21 The County shall continue to encourage 4-H and FFA programs for local youth.
- 1.22 Public agencies providing agricultural services shall be encouraged to continue agricultural research and education.
- 1.23 The County shall establish an agricultural center where offices of public agencies providing agricultural services shall be centrally located.

Background

Farmers and ranchers often lack the means to undertake the wide range of activities necessary to pursue new agricultural market opportunities and develop new products. Public educational institutions, including the University of California, California State University Stanislaus, and Modesto Junior College all provide some form of technical assistance to agriculture. However, these public institutions can be better utilized to help agricultural groups and individuals conduct market analyses, identify direct marketing opportunities, promote exports, and coordinate other economic development activities in support of local agriculture.

For example, Merced County and the Merced Community College are working together to operate an Agricultural Business and Trade Center. This program provides assistance to local farmers on all aspects of export sales, and it offers training programs to help farmers identify new export marketing opportunities.

Vocational agriculture programs provide education and hands-on experience for high school and MJC students in Stanislaus County. The 4-H and Future Farmers of America (FFA) programs also play an important role in agricultural education. 4-H programs are part of the U.C. Cooperative Extension, which receives County funding. FFA programs operate in conjunction with vocational agriculture programs in the public high schools and are not directly related to U.C. Cooperative

Extension. However, U.C. Cooperative Extension works with vocational agriculture teachers and provides assistance to vocational agriculture programs, both at the high school and the junior college levels.

Several public agencies conduct agricultural research and provide educational services at the County level: the U.S.D.A. Soil Conservation Service, the U.C. Cooperative Extension and the Stanislaus County Department of Agriculture. The last two agencies are currently located in County Center 3, which is targeted for redevelopment. The County has proposed to relocate those agencies in an agricultural center including local offices of the California Department of Food and Agriculture and the U.S. Department of Agriculture, as well as U.C. Cooperative Extension and the Department of Agriculture.

Implementation

- A. The County will work with administrators of Modesto Junior College, California State University Stanislaus, and the University of California to encourage the establishment of programs to provide more technical assistance related to agricultural economic development in Stanislaus County.
- B. Local 4-H programs will be encouraged by continued support of U.C. Cooperative Extension.
- C. The County will continue to support the County fair, which involves vocational agriculture, FFA and 4-H programs.
- D. The County will develop an agricultural center that houses the public agencies directly related to agriculture, including the U.C. Cooperative Extension, the Agricultural Commissioner, the U.S. Department of Agriculture, and the California Department of Food and Agriculture.

Responsible Agencies

- 1. Encourage public education institutions to provide more technical assistance related to agricultural economic development--U.C. Cooperative Extension, Planning Department, Agricultural Advisory Board, Board of Supervisors
- 2. Encourage 4-H, FFA and vocational agriculture programs--U.C. Cooperative Extension, Agricultural Advisory Board, Board of Supervisors
- 3. Establish an agricultural center to house public agencies providing agricultural services--U.C. Cooperative Extension, Agricultural Commissioner, Board of Supervisors

FOOD SAFETY AND USE OF CHEMICALS

Policies

- 1.24 The County shall continue to work with local, state and federal agencies to ensure the safety of food produced in Stanislaus County.
- 1.25 The County shall continue to work with local, state and federal agencies to regulate the application of agricultural chemicals, while ensuring the economic viability of agriculture.

Background

Consumers are increasingly concerned about the safety of the food they eat. The use of chemicals in growing and storing crops, the use of antibiotics and hormones in raising poultry and livestock, and the use of radiation to prolong the shelf-life of our food are types of agricultural practices that worry consumers who are concerned about food safety and its long-term impacts on their health.

The possibility of pesticide residues on fruits and vegetables is especially troubling to consumers. However, the results of the 1988 Pesticide Residue Monitoring Program operated by the California Department of Pesticide Regulation indicate that consumer fears may be unfounded: out of 9,293 samples, over 98.8 percent were well within legal limits, and no residues whatsoever were detected in 78 percent of the samples.

The lack of consumer confidence in food can be costly to the agricultural community. For example, a controversy about the use of Alar resulted in apples being temporarily removed from school lunch menus and caused a brief halt to many apple shipments in 1989.

The public is also concerned about the impact of agricultural chemicals on the environment. Air, soil and water quality problems can result from the unsafe application and disposal of agricultural chemicals.

The primary responsibility for regulating and monitoring the sale and use of pesticides rests with the California Department of Pesticide Regulation, which classifies and registers pesticides, and the Stanislaus County Agricultural Commissioner, who issues permits to possess and use restricted pesticides. In general, no restricted material can be possessed or used in any way until the applicator has obtained a permit from the Agricultural Commissioner.

The Agricultural Commissioner also operates programs for the inspection of fruits, vegetables and eggs to ensure quality produce; the inspection of nurseries and seed crops to guard against diseases and inferior plants; pest exclusion to prevent crop-destroying pests from becoming established in California; and pest detection to find pests at the lowest population and the in the smallest area possible in order to minimize the effects and costs of an eradication program.

The U.C. Cooperative Extension conducts educational and applied-research programs in integrated pest management and all other aspects of pest control.

Implementation

- A. The Agricultural Commissioner will continue to work with the California Department of Pesticide Regulation to ensure the safe use of agricultural chemicals. In addition to already-established programs, the Agricultural Commissioner will implement a new reporting system to meet the requirements of A.B. 2161, which requires every application of every type of pesticide or herbicide registered by the U.S. Environmental Protection Agency to be documented in monthly reports.
- B. The U.C. Cooperative Extension will continue to conduct educational and applied-research programs to promote food safety and agricultural practices that are environmentally sound.

Responsible Agencies

- 1. Work with local, state and federal agencies to ensure food safety--Agricultural Commissioner, U.C. Cooperative Extension
- 2. Work with local, state and federal agencies to ensure the safe application of agricultural chemicals--Agricultural Commissioner, U.C. Cooperative Extension

REGIONAL ASSOCIATION OF GOVERNMENTS

Policy

1.26 The County shall encourage the establishment of a voluntary regional association of governments for the Central Valley.

Background

The Central Valley has long been one of the premier agricultural regions in the world. Yet the Central Valley's population is growing rapidly, resulting in far-reaching demographic, social and economic changes. Some of the most obvious changes include crowded highways, polluted air, and homes and shopping centers sprouting from what used to be cropland. These types of regional impacts will likely have cumulative effects on agriculture, exerting a powerful influence over its future viability in the Central Valley.

One way to address regional impacts of growth and help ensure the continued success of agriculture in the Central Valley is to form a regional association or confederation of governments. Currently there are nine councils of government in the Central Valley, including Stanislaus Area Association of Governments (SAAG). These groups provide a forum for communication between the County government and municipalities within the County. However, there is no agency that coordinates planning and development activities of counties and cities for the entire Central Valley.

Eight regional associations involving more than one County government already exist in California, including the Southern California Association of Governments (SCAG) and the Association of Monterey Bay Area Governments (AMBAG).

Implementation

The Board of Supervisors will encourage the establishment of a voluntary regional association of governments in the Central Valley to address long-range planning, infrastructure, conservation and economic development issues facing the region. The association could be established by a joint powers agreement similar to that used to form a valleywide air pollution control agency composed of the eight counties in the San Joaquin Valley Air Basin.

Responsible Agency

Encourage the establishment of a voluntary regional association of governments in the Central Valley--Board of Supervisors

THE HISTORY OF THE UNITED STATES

OF THE UNITED STATES OF AMERICA

FROM THE FIRST SETTLEMENTS TO THE PRESENT TIME

BY JAMES M. SMITH

The history of the United States is a story of growth and development. It begins with the first settlers who came to the shores of North America in search of a new life. These pioneers faced many hardships and challenges, but they persevered and built a new nation. Over the years, the United States has grown from a small colony to a powerful world superpower. It has made significant contributions to science, technology, and culture. The story of the United States is a testament to the human spirit and the power of dreams.

The United States has a rich and diverse heritage. It is a land of many different peoples and cultures, each with its own unique traditions and customs. This diversity has been one of the strengths of the United States, allowing it to embrace change and innovation. The American dream is a powerful idea that has inspired millions of people around the world. It is the belief that anyone can achieve success and happiness through hard work and determination. The history of the United States is a story of hope and possibility.

The United States is a land of freedom and opportunity. It is a place where people can live their lives as they see fit, without the constraints of a tyrannical government. The American people have fought hard to protect their freedoms and ensure that they are passed on to future generations. The history of the United States is a story of courage and sacrifice.

The United States is a land of progress and innovation. It is a place where new ideas are born and where the impossible becomes possible. The American people have a long history of pushing the boundaries of what is possible. They have made significant contributions to science, technology, and the arts. The history of the United States is a story of progress and achievement.

The United States is a land of hope and promise. It is a place where the future is bright and where the possibilities are endless. The American people have a strong belief in the future of their country and in the power of their collective action. The history of the United States is a story of hope and promise.

GOAL TWO

PRESERVE OUR AGRICULTURAL LANDS FOR AGRICULTURAL USES.

Good agricultural land is a finite, irreplaceable resource. Some forms of damage to it may be reversible; others, like urban conversion, are probably not. Once agricultural land has been taken out of production and paved over to provide streets for residential subdivisions and parking lots for shopping centers, it is not likely to be farmed again. In most cases, the urbanization of productive agricultural land means the permanent loss of an irreplaceable resource.

Stanislaus County has some of the most productive farmlands in the nation. Those farmlands comprise the resource base of our biggest industry and have been largely responsible for its success. However, those farmlands are disappearing as cities and other urban areas expand to accommodate a rapidly increasing population.

Based on land use surveys by the Department of Water Resources, over 18,000 acres of land were urbanized in Stanislaus County between 1975 and 1988, most of which was irrigated farmland. As a result of unprecedented population growth, the rate of urbanization is escalating as cities and other urban areas expand to accommodate new residents. In addition to the acres converted from agricultural to urban uses, much farmland is undergoing parcelization and conversion to rural residences.

With our population expected to increase as much as 65 percent in the next 20 years, Stanislaus County will face increasing pressures to develop agricultural lands for non-farm residential, commercial and industrial uses. The policies and programs presented in the following section of this document are intended to provide a practical, effective framework for County land-use decisions regarding agricultural lands, with the overall goal of preserving agricultural lands for agricultural uses.

Nothing in this document is intended to stop the growth of cities and unincorporated communities in Stanislaus County. Fueled by unprecedented population increases in the State, growth is both inevitable and essential for continued economic health. At the same time, however, growth can be managed to ensure that negative impacts on air quality, water supplies and agricultural lands are minimized.

While all agricultural land in Stanislaus County cannot be preserved, it is possible to protect our most productive agricultural areas through a combination of agricultural zoning and policies that clearly direct growth to less productive areas. By balancing the need to create housing and job opportunities for an expanding population with the need to protect our agricultural lands, we will help ensure the continued success of local agriculture.

PARTICIPATION IN THE WILLIAMSON ACT

Policies

- 2.1 The County shall continue to provide property tax relief to agricultural landowners by participating in the Williamson Act.
- 2.2 The County shall support reasonable measures to strengthen the Williamson Act, making it a more effective tool for the protection of agricultural land.

Background

Participation in the Williamson Act, officially called the California Land Conservation Act of 1965, is the cornerstone of Stanislaus County's agricultural land conservation program. Under the Williamson Act, which is intended to conserve open space and agricultural land by providing landowners with property tax relief, local governments may enter into contracts with owners of agricultural or open space land. The landowner agrees to restrict use of the property to agriculture, open space, or related uses during the term of the contract. In return, the local government agrees to base property tax assessments on the restricted uses of the land, rather than its fair market value.

The Open Space Subvention Program, which is the companion to the Williamson Act, requires the State to partially reimburse local governments for foregone property tax revenues. In fiscal year 1988-89, subventions reimbursed an estimated average of 34% of total County general fund revenue losses. Most counties, hard-pressed to meet budgetary demands, would like to see the cost of implementing the Williamson Act split more evenly between the State and local governments.

Another criticism of the Williamson Act is that it requires only temporary commitments from landowners, in effect providing a ten-year tax shelter for developers. Critics also charge that local governments have not done as much as they could to integrate the Williamson Act with local land use planning objectives, using the Act as one component of a more comprehensive farmland protection program.

Numerous advisory committees and interest groups have studied the Williamson Act and recommended improvements, including restructuring the subvention formula to increase subvention payments to local governments and tying

subvention payments to the adoption of comprehensive local farmland protection programs. It has also been recommended that the State, rather than local government, grant approval of contract cancellations, and that the term of contracts be lengthened from ten to twenty years.

Despite its shortcomings, the Williamson Act enjoys widespread support among landowners and government officials. Although the Act has not prevented the conversion of agricultural land throughout California, it clearly has helped to stabilize farm income and keep many operators in business by limiting the tax burden on contracted parcels.

Stanislaus County has voluntarily participated in the Williamson Act program since 1970. Although the County's participation rate (approximately 85%) is one of the highest in the state, the County Assessor's office reports a dramatic increase in notices of nonrenewal and contract cancellations, particularly in the areas of north Modesto, Salida, Oakdale, Patterson and other areas along the I-5 corridor where development pressures are increasing. In fact, total acreage covered under contract has dropped from a high of 723,055 acres in fiscal year 1981-82 to 663,128 acres for FY 91-92.

This trend of increasing nonrenewals and cancellations is consistent with statewide patterns. It is generally agreed, however, that the Williamson Act continues to be an effective tool in helping keep agricultural land in agricultural use. Without the Williamson Act, the conversion of agricultural land in Stanislaus County and throughout the state likely would occur at even faster rates.

Implementation

- A. The County will continue to participate in the Williamson Act program, thereby providing property tax relief to farmers and ranchers who agree to keep their land in agricultural use.
- B. The County will encourage the State Legislature to increase Williamson Act subvention payments to local governments based on cost-of-living increases and/or a restructuring of the Williamson Act subventions schedule.
- C. The County will supplement the Williamson Act with other conservation tools in a comprehensive program for the protection of agricultural land.

Responsible Agencies

1. Continue participation in the Williamson Act program--County Assessor, Planning Department, Planning Commission, Board of Supervisors
2. Encourage increased subvention payments--County Assessor, Board of Supervisors
3. Supplement the Williamson Act--Planning Department, Planning Commission, Board of Supervisors

URBANIZATION AND THE CONVERSION OF AGRICULTURAL LAND

Policies

- 2.3 To reduce development pressures on agricultural lands, higher density development and in-filling shall be encouraged in urban and built-up areas of the County.
- 2.4 To the greatest extent possible, development shall be directed away from the County's most productive agricultural areas.
- 2.5 New areas for urban development (as opposed to expansion of existing areas) shall be limited to less productive agricultural areas.
- 2.6 Agricultural lands restricted to agricultural use shall not be assessed to pay for infrastructure needed to accommodate development.
- 2.7 Proposed amendments to the General Plan Diagram (map) that would allow the conversion of agricultural land to non-agricultural uses shall be approved only if they are consistent with the County's conversion criteria.

Background

In Stanislaus County, urbanization and farmland conversion are like two sides of the same coin. As urban areas expand to accommodate a growing population, surrounding farmland is converted to residential subdivisions, shopping centers and industrial parks. And, as noted in the American Farmland Trust report on agriculture in the Central Valley, history almost guarantees that the very best farmland is urbanized first.

Like many other farming areas, the towns in Stanislaus County began as agricultural service centers and located where the farms were, on the valley floor. As these towns have outgrown their original functions, they have expanded outward onto our richest, most productive soils. Today, urban development has spread over approximately 48,000 acres, most of which was once prime farmland in agricultural production.

As shown in Table 3, both the total County population and the extent of urban land have increased sharply since 1975. From 1980 to 1988, population increased 25 percent while urban land increased 23 percent. By the year 2010, Stanislaus County is expected to have as many as 610,000 residents--an 83% increase over

1988. If urban land increases in the same proportion to population as it did from 1980 to 1988, another 36,358 acres of urban land will be needed to accommodate the anticipated increase of 276,801 people.

Table 4 shows that approximately 25,054 acres of farmland lie within existing city spheres of influence and will likely be urbanized within the next 20 years. But even if city spheres of influence are completely built out, another 11,304 acres of urban land will still be needed for a total of 84,197 acres by the year 2010. If the current trend continues and population growth is mainly accommodated by the expansion of existing urban centers onto productive agricultural lands, the resource base of our biggest industry will be seriously threatened.

TABLE 3
ESTIMATED POPULATION AND URBAN LAND

	<u>Population</u>		<u>Acres of Urban Land</u>	
1975	224,709		29,838	
1980	265,900	+18%	38,784	+30%
1988	333,199	+25%	47,839	+23%
2010	610,000	+83%	84,197	+76%

Sources: California Department of Finance, U.S. Bureau of the Census, QED Research, Inc., California Department of Water Resources land use surveys.

Note: The years 1975, 1980 and 1988 are selected for comparison because Department of Water Resources land use surveys of Stanislaus County were conducted in those years.

TABLE 4
LAND IN CITY SPHERES OF INFLUENCE, 1991

<u>City</u>	<u>Urban Acres</u>	<u>Farmland Acres</u>	<u>Other *</u> <u>Acres</u>	<u>Total SOI Acres</u>
Modesto	20,716	11,755	0	32,471
Ceres	4,174	3,946	357	8,477
Riverbank	1,321	1,567	0	2,888
Hughson	544	568	0	1,112
Oakdale	1,862	1,474	0	3,336
Waterford	913	159	0	1,072
Turlock	6,185	3,754	393	10,332
Newman	628	633	0	1,261
Patterson	<u>574</u>	<u>1,198</u>	<u>0</u>	<u>1,722</u>
County Totals	36,917	25,054	750	62,721

* Includes native vegetation, government land, road systems, vacant and non-agricultural parcels of more than 40 acres surrounded by urban development.

Sources: Adapted from American Farmland Trust Central Valley LAFCO Land Use Survey, 1989, based on Department of Conservation, Farmland Mapping and Monitoring Program, land use surveys, 1986; Department of Water Resources land use surveys, 1980-88; Stanislaus LAFCO Sphere of Influence Boundary Maps, 1989.

To accommodate a rapidly increasing population while at the same time protecting agriculture's resource base, new urban development (as opposed to expansion of existing urban areas) should be directed away from our most productive agricultural areas and guided instead to less productive farmlands and grazing lands, which generally are located on the western and eastern sides of the County.

Remote development, or development that takes place away from existing cities or urban centers, has traditionally been discouraged by planners and County officials in favor of the compact expansion of already existing urban centers. However, remote development in less productive agricultural areas offers a better alternative to the unlimited expansion of established cities and towns into our most productive agricultural areas. The concept of remote development as a strategy for reducing growth pressure on our most productive agricultural areas was introduced in the Economic Strategic Plan for Stanislaus County (July 1989).

Existing County policy regarding remote development is stated in Policy Ten of the Land Use Element: "New areas for urban development (as opposed to expansion of existing areas) shall be limited to areas of diminished agricultural importance." Because of the difficulty in defining "diminished agricultural importance," this policy should be amended to be consistent with Policy 2.5 above. "Most productive agricultural areas" should be defined and mapped to indicate their location in the County; all other agricultural lands will be considered "less productive agricultural areas."

In defining the County's most productive agricultural areas, it is important to recognize that soil types alone should not be the determining factor. With modern management techniques, almost any soil type in Stanislaus County can be extremely productive. At the same time, many of our most valuable agricultural commodities are produced on lesser quality soils. For example, with a value of more than \$268 million in 1991, milk is the County's top-grossing commodity. Yet most of the dairy farms in Stanislaus County are located in areas that might be considered less productive agricultural lands, based solely on soil capability. Although soil types should be considered, the designation of "most productive agricultural areas" also should be based on existing uses and their contributions to the agricultural sector of our economy.

Implementation

- A. The County will work with the cities and towns to encourage higher density development and in-filling of already-existing urban areas.
- B. Until the term "Most Productive Agricultural Areas" is defined on a countywide basis, the term will be determined on a case-by-case basis when a proposal is made for the conversion of agricultural land. Factors to be considered include but are not limited to soil types and potential for agricultural production; the availability of irrigation water; ownership and parcelization patterns; uniqueness and flexibility of use; the existence of Williamson Act contracts; existing uses and their contributions to the agricultural sector of the local economy. As an example, some grazing lands, dairy regions and poultry-producing areas as well as farmlands can be considered "Most Productive Agricultural Areas." Failure to farm specific parcels will not eliminate them from being considered "Most Productive Agricultural Areas." Areas considered to be "Most Productive Agricultural Areas" will not include any land within LAFCO-approved spheres of influence of cities or community services districts and sanitary districts serving unincorporated communities. Agricultural lands outside these boundaries and not considered to be "Most Productive Agricultural Areas" will be considered "Less Productive Agricultural Areas."
- C. Policy Ten of the Land Use Element will be amended to be consistent with Policy 2.5 of the Agricultural Element.
- D. Current procedures for General Plan amendments will be changed to include the following requirements for evaluating proposed amendments to the General Plan Diagram (map) that would allow the conversion of agricultural land to urban uses:

Conversion Consequences. The direct and indirect effects, as well as the cumulative effects, of the proposed conversion of agricultural land shall be fully evaluated.

Conversion Considerations. In evaluating the consequences of a proposed amendment, the following factors shall be considered: plan designation; soil type; adjacent uses; proposed method of sewage treatment; availability of water, transportation, public utilities, fire and police protection, and other public services; proximity to existing airports and airstrips; impacts on air and water quality, wildlife habitat, endangered species and sensitive lands; and any other factors that may aid the evaluation process.

Conversion Criteria. Proposed amendments to the General Plan Diagram (map) that would allow the conversion of agricultural land to urban uses shall be approved only if the Board of Supervisors makes the following findings:

1. Overall, the proposal is consistent with the goals and policies of the General Plan, and specifically is consistent with Policies 2.4 and 2.5 of this Agricultural Element.
2. There is evidence on the record to show a demonstrated need for the proposed project based on population projections, past growth rates and other pertinent data.
3. No feasible alternative site exists in areas already designated for the proposed uses.
4. Approval of the proposal will not constitute a part of, or encourage, piecemeal conversion of a larger agricultural area to non-agricultural uses, and will not be growth-inducing (as used in the California Environmental Quality Act).
5. The proposed project is designed to minimize conflict and will not interfere with agricultural operations on surrounding agricultural lands or adversely affect agricultural water supplies.
6. Adequate and necessary public services and facilities are available or will be made available as a result of the development.
7. The design of the proposed project has incorporated all reasonable measures, as determined during the CEQA review process, to mitigate impacts to fish and wildlife resources, air quality, water quality and quantity, or other natural resources.

Responsible Agencies

1. Work with cities and towns to encourage higher density development and in-filling of existing urban areas--Planning Department, Board of Supervisors
2. Define "Most Productive Agricultural Areas"--Planning Department, Planning Commission, Board of Supervisors, Agricultural Commissioner
3. Amend Policy Ten of the Land Use Element to be consistent with Policy 2.5

of the Agricultural Element--Planning Department, Planning Commission,
Board of Supervisors

4. Exempt agricultural uses from public facility fees--Department of Public Works, Board of Supervisors
5. Amend procedures for General Plan amendments that would allow the conversion of land from agricultural to urban uses--Planning Department, Planning Commission, Board of Supervisors

EXPANSION OF CITIES AND UNINCORPORATED COMMUNITIES

Policies

- 2.8 The County recognizes the right of cities and unincorporated communities to grow and prosper and shall not oppose reasonable requests to expand spheres of influence of cities or community services districts and sanitary districts serving unincorporated communities to accommodate growth.
- 2.9 In recognition that unincorporated land within spheres of influence of cities or community services districts and sanitary districts serving unincorporated communities ultimately will be urbanized, the County shall cooperate with cities and unincorporated communities in managing development in urban transition areas.
- 2.10 The County shall continue to encourage the upgrading of existing unincorporated communities.
- 2.11 The County shall discourage the expansion of spheres of influence of cities or community services districts and sanitary districts serving unincorporated communities into its most productive agricultural areas.

Background

In 1984, the Stanislaus Local Agency Formation Commission (LAFCO) adopted spheres of influence for each city in Stanislaus County as required by state law. These spheres indicate the probable ultimate boundaries and service areas of the cities, and they are intended to promote the efficient provision of urban services, including sewer, water, police protection and fire protection. Spheres of influence also are intended to encourage the conservation of agricultural lands.

Similarly, community services districts and sanitary districts serving unincorporated communities also have spheres of influence that indicate their probable ultimate boundaries.

With the approval of LAFCO, spheres of influence of cities and of community services districts and sanitary districts serving unincorporated communities can be expanded to accommodate growth. The question of whether or not proposed expansions should be allowed is decided solely by LAFCO. Because LAFCO is an independent agency distinct from Stanislaus County government, it is not bound by the County's General Plan. In other words, the County does not have the ability to determine whether spheres of influence can expand. However, the

County can make recommendations to LAFCO, and LAFCO will take the County General Plan into consideration when deciding whether to approve proposed expansions.

In recognition that unincorporated land within the established spheres of influence of cities or community services districts and sanitary districts serving unincorporated communities ultimately will be urbanized, these lands generally are designated Urban Transition (UT) and zoned General Agriculture (A-2) until annexed by the city or special district.

Existing policy in the Land Use Element delineates the County's role in managing the development of urban transition areas within city spheres of influence. Reflecting agreements between the County and eight cities (excluding Turlock), these policies provide that the County shall refer all development proposals to the appropriate city to determine whether or not the proposal should be approved. Additionally, the County will limit its approval of discretionary projects to agricultural uses and churches.

The Land Use Element also includes policies regarding the development of unincorporated communities and the expansion of urban boundaries (Policies Six and Thirteen). The County is actively encouraging the upgrading of unincorporated communities through its redevelopment program, which will provide a significant tool for improving infrastructure and enhancing the quality of life in these areas.

Implementation

- A. In designating its Most Productive Agricultural Areas, the County shall exclude any land within LAFCO-approved spheres of influence of cities or community services districts and sanitary districts serving unincorporated communities.
- B. The County will continue to implement its policies and agreements with cities regarding the development of unincorporated lands within spheres of influence.
- C. The County will continue to implement policies in the Land Use Element regarding the development of unincorporated communities and expansion of their urban, or service district, boundaries. For consistency, Policies Six and Thirteen of the Land Use Element will be amended to read "community services district and sanitary district boundaries" rather than "urban boundaries."

- D. When cities or community services districts and sanitary districts serving unincorporated communities propose to expand their boundaries, the County will work with them in order to minimize the impact on agricultural lands.
- E. When cities or community services districts and sanitary districts serving unincorporated communities request LAFCO to approve the expansion of a sphere of influence, the County will recommend that LAFCO not approve expansions into the County's most productive agricultural areas.
- F. The County will urge LAFCO to strengthen its policies, standards and procedures for evaluating proposed annexations of agricultural land and proposed expansions of service districts or spheres of influence onto agricultural land.

Responsible Agencies

- 1. In designating the County's Most Productive Agricultural Areas, exclude any land within spheres of influence of cities or service districts of unincorporated communities--Planning Department, Planning Commission, Board of Supervisors
- 2. Continue to implement land use policies and agreements regarding development of unincorporated lands within city spheres of influence--Planning Department, Planning Commission, Board of Supervisors
- 3. Continue to implement existing land use policies regarding development of unincorporated communities and expansion of their service district boundaries--Planning Department, Planning Commission, Board of Supervisors
- 4. Work with cities to minimize impacts on agricultural lands when they propose to expand their spheres of influence--Planning Department, Planning Commission, Board of Supervisors, Agricultural Commissioner
- 5. Recommend that LAFCO not approve proposed expansions of spheres of influence of cities or community services districts and sanitary districts into County's Most Productive Agricultural Areas--Planning Department, Planning Commission, Board of Supervisors

ASSESSING AND MITIGATING THE IMPACTS OF FARMLAND CONVERSION

Policies

- 2.12 When the County determines that the proposed conversion of agricultural land to non-agricultural uses could have a significant effect on the environment, the County shall fully evaluate on a project-specific basis the direct and indirect effects, as well as the cumulative effects of the conversion.
- 2.13 To the greatest extent feasible, the County shall require mitigation of the impacts of farmland conversion.

Background

The conversion of agricultural land to non-agricultural uses has far-reaching impacts on the land, water and air resources that support our biggest industry. For example, taking out an almond orchard and building a residential subdivision in its place may involve paving over groundwater recharge areas, which will have a long-term effect on groundwater resources. Similarly, new roads providing access to the subdivision may increase traffic congestion, resulting in a cumulative impact on air quality.

The California Environmental Quality Act (CEQA) requires the County to consider the environmental consequences of development-related projects and to ensure that adverse environmental impacts are avoided or minimized as much as possible. If the County determines in its Initial Study that a project could have a significant adverse environmental effect, the County must require preparation of an Environmental Impact Report (EIR) to fully assess potential impacts, propose ways to minimize or mitigate those impacts, and consider alternatives to the proposed project. The County may approve a project only if mitigation measures are adopted whenever feasible to avoid or reduce all significant environmental impacts.

Under CEQA Guidelines, the County has some discretion in determining whether the conversion of agricultural land will have a significant adverse effect on the environment. Appendix G specifies that a project will normally have a significant effect on the environment if it will convert prime agricultural land to non-agricultural use or impair the productivity of prime agricultural land. "Prime agricultural land" is not defined.

Several attempts have been made in recent years to allow or require local governments to establish a threshold of agricultural land loss for the purpose of determining a significant effect on the environment and thereby necessitating an EIR. However, instead of using an arbitrary threshold such as 100 acres to trigger an EIR, the County prefers to evaluate each project on a case-by-case basis. When the County determines that under the specific circumstances of the proposed project the conversion of agricultural land could have a significant effect, the County requires preparation of an EIR. The problem is that EIRs do not always adequately identify and evaluate the impacts of farmland conversion and related issues.

In a recent study commissioned by the California Department of Conservation, 247 draft EIRs for projects involving the conversion of 100 acres or more of agricultural land throughout the State were reviewed. As reported in The Impacts of Farmland Conversion in California (Jones & Stokes Associates, Inc., 1991), the EIRs frequently failed to identify or substantially mitigate most of the adverse impacts that commonly result from farmland conversion.

More specifically, the study showed that analysis of the impacts of farmland conversion was often limited to a discussion of the prime soils that the project would make unavailable for farming. Few EIRs presented sufficient information on the agricultural setting to allow a reasoned evaluation of the significance of farmland losses. Most of the other impacts, including land use conflicts, regional economic impacts, growth inducement and cumulative impacts, usually were discussed only sporadically. The study also revealed that no reviewed EIRs proposed mitigation measures to reduce these impacts to a less-than-significant level. Similarly, measures rarely were specified to reduce impacts on surrounding farming operations.

Based on these findings, the study concludes that "Additional direction is apparently needed to guide EIR preparers in assessing farmland conversion impacts and to guide agencies in reviewing EIRs as a basis for decision-making" (p. 5-7). Since neither CEQA nor the State CEQA Guidelines presently contain detailed procedures or guidance concerning when and how agencies should address farmland conversion impacts, the study suggests several amendments to existing state law. One of those suggested amendments is an appendix to State CEQA Guidelines for assessing and mitigating impacts of farmland conversion. The suggested appendix is included here as Appendix C.

The County should amend its own CEQA Guidelines to include guidelines for assessing and mitigating impacts of farmland conversion based on the model presented in Appendix C.

Implementation

- A. The County will continue to evaluate each project on a case-by-case basis to determine whether the conversion of agricultural land will have a significant adverse effect on the environment.
- B. When it determines that the conversion of agricultural land will have a significant adverse effect on the environment, the County will continue to require preparation of an EIR to fully assess the impacts of the conversion, propose mitigation measures, and consider alternatives to the proposed project.
- C. The County will develop and adopt guidelines for assessing and mitigating impacts of farmland conversion based on the model guidelines presented in Appendix C. These guidelines will apply only to EIRs.
- D. To facilitate the mitigation of the impacts of farmland conversion, the County--if requested--may make information available on private, non-profit agricultural land trusts, may serve on committees that are formed for the purpose of establishing an agricultural land trust, and may coordinate County mitigation programs with the land trust once it is established.

Responsible Agencies

- 1. Continue to evaluate projects on a case-by-case basis rather than establishing an arbitrary threshold to trigger an EIR--Planning Department, Planning Commission, Board of Supervisors
- 2. Continue to require EIRs when farmland conversion is considered to have a significant effect on the environment--Planning Department, Planning Commission, Board of Supervisors
- 3. Develop and adopt guidelines for assessing and mitigating impacts of farmland conversion--Planning Department, Planning Commission, Board of Supervisors

CLUSTERED DEVELOPMENT

Policies

2.14 In designated areas of agricultural land, the County shall encourage clustering, or grouping together, of allowable dwelling units on relatively small parcels instead of the dispersal of such dwelling units on larger parcels.

Background

Traditional agricultural zoning such as existing A-2 zoning in Stanislaus County is intended to help keep agricultural lands in large parcels suitable for commercial farming and ranching. However, under certain circumstances traditional zoning can actually encourage inefficient parcelization and residential scattering on agricultural lands.

For example, a landowner with a 2,000-acre farm zoned A-2-40 can legally divide his property into 50 parcels of 40 acres each; each of those 40-acre parcels is entitled to two dwellings. Theoretically, then, the original 2,000-acre farm can become 50 parcels with 100 dwelling units spread over the entire area. More likely, there will be only one dwelling per 40-acre parcel, for homeowners usually prefer to have exclusive ownership of the parcel on which their residence is located. However, the end result is the same: what was once a viable commercial farming unit is split up into smaller, inefficient farming units with a substantial number of residences scattered throughout.

With increasing pressure to sell farmland and grazing land for rural residential development, this kind of large-lot subdivision is becoming more common in Stanislaus County.

San Luis Obispo County has addressed this problem by adopting an agricultural lands clustering ordinance. The ordinance allows the development of clustered homesites ranging in size from .25 to 2.5 acres. The number of homesites cannot exceed the number of dwellings that could normally be established in an agricultural zone through standard land division. In return for being allowed to cluster, which provides flexibility and reduces the developer's costs for providing roads and services, a minimum of 95% of the land must be retained as agricultural land or open space as long as the clustered lots exist--effectively in perpetuity. Clustering also helps minimize conflicts over agricultural practices.

At least one major project, the Varian Ranch, has been developed under the San Luis Obispo County clustering ordinance. The 3,127-acre project was designed to accommodate 48 homesites ranging in size from .5 acres to 2.5 acres, spread over 700 acres. In an innovative approach, the 48 new owners are purchasing the entire ranch--not just the parcels on which their homes will be built--and, as a group, the landowners make up the Varian Ranch Home Owners Association. Through clustering and careful design, the Varian Ranch will remain a working cattle ranch, as it has been for nearly 200 years.

Adoption of a voluntary agricultural lands clustering ordinance similar to San Luis Obispo County's would enable agricultural landowners in Stanislaus County to realize some reasonable return on their land investment while guaranteeing the long-term preservation of agricultural lands and open space. At the same time, developers would benefit through increased flexibility and reduced costs of providing roads and services. Clustering also would help minimize conflicts over agricultural operations.

Critics charge that the ability to develop clustered residential areas may actually encourage the development of agricultural lands and result in increased conflicts over agricultural operations. However, most planners agree that the benefits outweigh the costs of clustered development if it is carefully designed and implemented. To minimize potential problems, clustering should be permitted only in designated areas of the County.

Implementation

The County will develop and adopt an agricultural lands clustering ordinance that will enable, but not require, the development of innovative projects such as the Varian Ranch. The ordinance will allow clustering of dwelling units on relatively small parcels instead of scattering residences on larger parcels over the entire area. The ordinance will establish which lands are eligible for clustering; standards and criteria for approval of clustered development; the allowed number of parcels and residential density; requirements for preservation of agricultural land and open space; environmental review; site design and development standards; and any other necessary requirements.

Responsible Agencies

Develop and adopt an agricultural lands clustering ordinance--
Planning Department, Planning Commission, Board of Supervisors.

ANTIQUATED SUBDIVISIONS

Policies

- 2.15 The County shall encourage the merger of antiquated subdivisions, which could have significant adverse impacts on the local economy and environment, into larger agricultural holdings.

Background

One of the biggest threats to Stanislaus County's agricultural economy is the potential creation of hundreds of ranchettes in antiquated subdivisions.

Antiquated subdivisions are subdivisions created in the early part of this century--generally more than 60 years ago--that exist on paper but have never been developed or sold in lots. Numerous antiquated subdivisions are located throughout Stanislaus County, involving more than 3,000 lots ranging in size from 3,250 square feet to 20 acres or more. If these lots were sold and developed, the loss of agricultural land coupled with the impact on surrounding agricultural operations could be devastating to the long-term viability of the agricultural economy.

Created prior to enactment of the State Subdivision Map Act and the California Environmental Quality Act, antiquated subdivisions were created without any kind of formal review to evaluate their economic and environmental consequences to the County. In addition to having adverse impacts on agriculture, antiquated subdivisions pose a variety of environmental threats including groundwater contamination from the concentration of on-site septic systems and the generation of dust and auto emissions from increased traffic on unimproved access roads. The County's ability to provide emergency services such as fire protection, sheriff and ambulance services also could be adversely affected. Similarly, potential impacts of antiquated subdivisions on schools, parks and recreation have never been fully evaluated.

Merced County has addressed this problem by adopting a merger ordinance to provide for the merger of contiguous parcels of land that do not meet current development standards and are inconsistent with the Merced County General Plan. Stanislaus County could adopt a similar ordinance.

Implementation

- A. The County will develop and adopt a merger ordinance to provide for the merger of contiguous parcels in antiquated subdivisions.
- B. The County will initiate a program to implement the merger ordinance on an individual subdivision basis, concentrating on subdivisions that meet the following criteria:
 - 1) The subdivision involves more than five lots;
 - 2) The property is under one ownership;
 - 3) The property consists of productive agricultural land;
 - 4) The lot sizes of the antiquated subdivision are small enough to pose a threat to the groundwater in the area based on the determination of the Department of Environmental Resources; and
 - 5) Implementation of the subdivision would be clearly inconsistent with the agriculture-related policies of the Land Use, Open Space/Conservation and Agricultural Elements of the Stanislaus County General Plan.

Responsible Agencies

Develop, adopt and implement merger ordinance--Planning Department, Planning Commission and Board of Supervisors



GOAL THREE

PROTECT THE NATURAL RESOURCES THAT SUSTAIN OUR AGRICULTURAL INDUSTRY.

Agriculture depends directly on the land, air, water and soil resources that sustain its productivity. The success of agriculture in Stanislaus County can be largely attributed to the abundance of agricultural lands, fertile soils and high-quality irrigation water that traditionally have been available for the production of a wide variety of products.

Today the continued availability of those resources no longer can be taken for granted. In the process of rapid urbanization to accommodate a booming population, Stanislaus County is losing productive farmlands to urban development. At the same time, deteriorating air quality is damaging valuable crops, water contamination and supply problems are leading to increased competition for water sources, and erosion is degrading long-term soil productivity. Ultimately these problems threaten the County's agricultural economy and our ability to help feed the nation.

Urbanization and the conversion of agricultural land are addressed under Goal Two, which focuses primarily on land-use issues regarding our agricultural lands. Other resource problems such as air quality, water quality and supply, and soil quality are addressed in the following section of this document. The policies presented under Goal Three are intended to ensure the long-term protection of the natural resources that sustain our agricultural industry.

AIR QUALITY

Policies

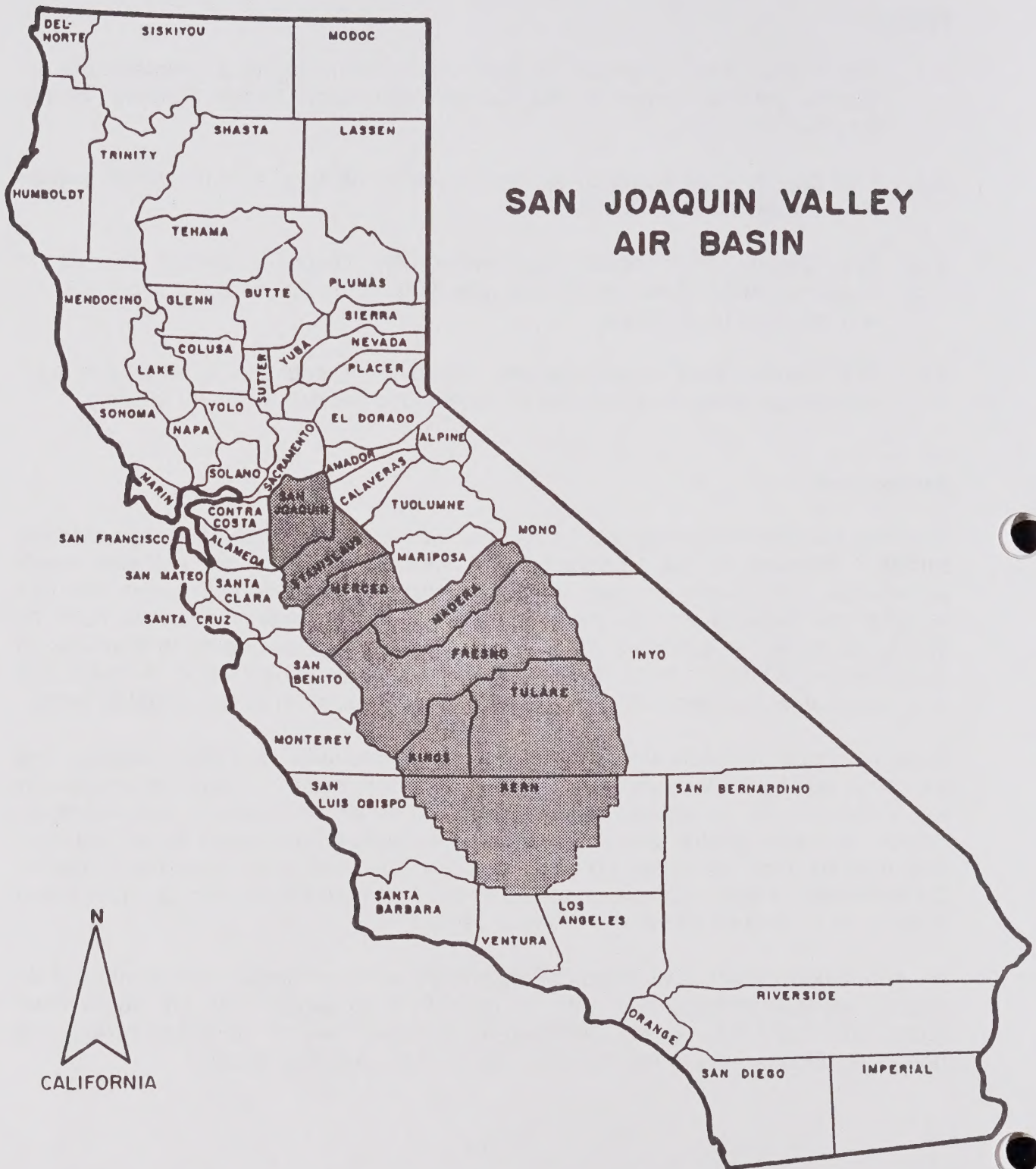
- 3.1 The County shall improve air quality by continuing to implement the air quality policies stated in the Conservation/Open Space Element of the General Plan.
- 3.2 The County shall continue to participate in the San Joaquin Valley Unified Air Pollution Control District.
- 3.3 The County shall assist the Unified Air Pollution Control District in implementation of the attainment plan adopted under the California Clean Air Act of 1988 (A.B. 2595).
- 3.4 The County shall encourage the development and use of improved agricultural practices that improve air quality and are economically feasible.

Background

The San Joaquin Valley has been called one of the world's biggest smog-collecting basins. Because of its topography and weather patterns, air pollution levels sometimes climb nearly as high as those in the Los Angeles basin--with just one seventh the population. As the valley's population increases over the next 20 years, air quality is expected to deteriorate despite improvements in methods of reducing air pollution. More people will operate more vehicles and factories and use more solvents, chemicals and industrial processes, all of which produce smog.

Poor air quality not only threatens the health of residents, but also threatens the health of our agricultural industry by reducing crop yields. Based on studies by the California Air Resources Board (CARB), five of the valley's crops--grapes, cotton, oranges, alfalfa, and tomatoes--are so severely damaged by air pollution that their harvests are down 10 to 20 percent from what they should be. Overall, CARB estimates that total crop losses due to air pollution in the San Joaquin Valley amount to more than \$150 million every year.

As population growth and industrial expansion leads to further deterioration of air quality, agriculture pays the price in reduced crop yields. At the same time, agriculture itself has been identified as a major source of particulate-matter pollution. Fine or very small particles, like dust or soot, can reduce



visibility and cause health problems. Common agricultural practices such as open burning, use of nut hullers, and plowing fields can contribute to increased levels of particulate matter in the air. Some of these practices, such as open burning, are limited by state and local regulations. Standards and regulations for sources of fine particles (PM10s) are currently being developed and are likely to further limit agricultural practices.

Air quality in the San Joaquin Valley is monitored and standards are enforced by the California Air Resources Board and the Unified Air Pollution Control District, which is composed of the eight counties in the San Joaquin Valley air basin. The Unified District was formed in recognition of the fact that air pollution is not limited by County lines--it is a regional problem affecting the entire valley. The lack of consistent standards and enforcement from one County to another makes it difficult to effectively address the cumulative impacts of pollution.

The Conservation/Open Space Element of the General Plan includes policies and implementation measures to improve air quality by monitoring sources of air pollutants and by adopting programs for improvement of air quality problems in the Central Valley; to ensure that circulation systems shall be designed and maintained to minimize traffic congestion and air pollution; to include effective methods for reducing air pollution in industrial and commercial development proposals; and to support the policies and implementation measures of the Air Quality Maintenance Plan developed by SAAG.

Implementation

- A. To address air quality problems on a regional basis, the County joined the seven other counties in the San Joaquin Valley air basin in forming the Unified Air Pollution Control District. The Unified District is in the process of establishing one set of air pollution control rules for the entire valley.
- B. The Unified District is also involved in a \$16 million valley-wide air quality study, financed through a public-private partnership of government and industry, and the development of a valley-wide plan for the reduction of fine particles (PM10s) resulting from agricultural practices. Each of the eight member counties has an agriculture committee currently working on this project.
- C. On January 30, 1992, the Unified District adopted the attainment plan required under A.B. 2595, known as the California Clean Air Act of 1988. Once it is approved by the California Air Resources Board, the plan will be implemented by the Unified District in conjunction with any local agencies involved.

- D. To encourage the development and use of improved agricultural practices that reduce the production of fine particles (PM10s), the U.C. Cooperative Extension and the Agricultural Commissioner will work with the Farm Bureau, Modesto Junior College and any other organization involved in agricultural research and education.

Responsible Agencies

1. Continue to implement the air quality policies of the Conservation/Open Space Element of the General Plan--Planning Department, Planning Commission, Board of Supervisors
2. Continue to participate in the San Joaquin Valley Unified Air Pollution Control District--Board of Supervisors
3. Implement the attainment plan adopted under the California Clean Air Act--Unified Air Pollution Control District, Stanislaus Area Association of Governments, Department of Environmental Resources, Planning Department, Planning Commission, Board of Supervisors
4. Encourage the development and use of improved agricultural practices that reduce the production of fine particles (PM10s) and other sources of air pollution--Soil Conservation Service, U.C. Cooperative Extension, Agricultural Commissioner, Department of Environmental Resources, Agricultural Advisory Board, Board of Supervisors

WATER RESOURCES

Policies

- 3.5 The County shall protect water resources by continuing to implement the water policies stated in the Conservation/Open Space Element of the General Plan.
- 3.6 The County shall encourage the conservation of water for both agricultural and urban uses.
- 3.7 The County shall continue to encourage the use of agricultural and urban practices that help reduce water quality problems.

Background

Water is the lifeblood of agriculture in Stanislaus County. To supplement an average rainfall of just 12 inches per year, local agriculture relies on a network of irrigation water delivery systems to sustain its broad diversity of valuable crops.

Compared to many other areas of the arid Central Valley, Stanislaus County has abundant water resources, at least in times of normal rainfall. The availability of high-quality, low-cost irrigation water traditionally has given local agriculture a competitive edge and has been largely responsible for its success. Yet five consecutive years of drought (1986-91) have clearly illustrated the limitations of our water resources.

The main sources of irrigation water are the Stanislaus, Tuolumne and San Joaquin Rivers, all of which originate in the Sierra Nevada Mountains. Groundwater is used to supplement irrigation supplies, and is the major source of domestic and industrial water.

As described in the support document of the General Plan (pp. 111-113), there are significant groundwater quality problems, especially west of the San Joaquin River. In addition, some areas of the County, such as the Modesto area, are experiencing a dropping water table due to the depletion of groundwater supplies. As groundwater becomes unavailable for domestic use, other sources have to be found. As a result, urban and agricultural users are becoming more competitive for water supplies.

A 1988 Department of Water Resources study of agricultural and urban water requirements in Stanislaus County east of the San Joaquin River showed that agriculture used approximately 3.5 acre-feet of water per acre of cropland, whereas urban uses averaged 4.5 acre-feet of water per acre of urban land. If those trends continue, the competition between agriculture and urban uses for water supplies is likely to intensify as the County's population grows and urban areas expand.

Conservation is the most cost-effective way to ensure adequate water supplies for all residents of Stanislaus County. Local farmers long have practiced conservation methods, and their ability to survive dry years is indicative of their success. However, research is continually improving agricultural technology, and water-saving innovations need to be introduced to local farmers through on-going conservation programs.

Domestic and industrial users also need to be informed about the need for conservation and methods of lowering their water requirements. All types of water sources in the County are increasingly interdependent. The availability of irrigation water is affected by the use of water by city-dwellers and businesses; the availability of drinking water and industrial water is affected by agricultural practices.

Implementation

- A. The Conservation/Open Space Element of the General Plan includes policies and implementation measures to protect groundwater aquifers and recharge areas, preserve vegetation to protect waterways from bank erosion and siltation, encourage all new urban development within spheres of influence to be served by public sewer and water systems rather than septic tanks and wells, to expand the water monitoring program of the Department of Environmental Resources, and to investigate additional sources of water for domestic and irrigation use.
- B. To encourage water conservation by farmers, the Agricultural Commissioner and U.C. Cooperative Extension will continue to provide information on irrigation methods and best management practices and will coordinate with conservation efforts of the Farm Bureau, Resource Conservation Districts, the Soil Conservation Service, and irrigation districts.
- C. To encourage urban water conservation, the Department of Environmental Resources will coordinate with conservation efforts of cities, local water districts and irrigation districts that deliver domestic water.

- D. The Department of Environmental Resources will continue to require analysis of groundwater impacts in Environmental Impact Reports for proposed developments. The Department of Environmental Resources also will develop and implement an animal confinement facilities ordinance to ensure compliance with regulations of the State Water Quality Control Board.
- E. The Planning Department, Planning Commission and Board of Supervisors will consider requiring water-conserving landscaping when reviewing proposed developments.
- F. The Board of Supervisors will work with local irrigation districts to preserve water rights and ensure that water saved through conservation may be stored and used locally, rather than "appropriated" and moved to metropolitan areas outside of Stanislaus County.

Responsible Agencies

- 1. Continue to implement the water policies stated in the Conservation/Open Space Element of the General Plan--Department of Environmental Resources, Planning Department, Planning Commission, Board of Supervisors
- 2. Encourage the conservation of water for agricultural and urban uses--U.C. Cooperative Extension, Agricultural Commissioner, Agricultural Advisory Board, Department of Environmental Resources, Planning Department, Planning Commission, Board of Supervisors
- 3. Continue to encourage the use of agricultural practices that help reduce water quality problems--U.C. Cooperative Extension, Agricultural Commissioner, Agricultural Advisory Board, Department of Environmental Resources, Board of Supervisors
- 4. Work with local irrigation districts to preserve water rights and ensure that water saved through conservation may be stored locally rather than moved to metropolitan areas outside of the County--Board of Supervisors

SOIL RESOURCES

Policy

3.8 The County shall encourage the conservation of soil resources.

Background

The continued success of agriculture in Stanislaus County depends on conserving our soil resource base. In addition to supporting the production of crops and livestock forage, soil is a vital part of the ecosystem and a record of past biological and physical processes. Formed slowly through the interaction of climate, living and decomposing organisms, local geology and erosion, soil is considered a non-renewable resource that requires proper management to ensure its continued productivity.

As described in the support document of the General Plan, there are two main soil management problems in Stanislaus County: salinity, or the build-up of salts, and erosion caused by wind and water. Salinity is especially problematic west of the San Joaquin River, where a perched water table, low-quality irrigation water, and poor drainage have resulted in the build up of salt and mineral concentrations in the soil. Wind and water erosion is more widespread, resulting in the loss of productive topsoil and contributing to air and water quality problems throughout the County.

Resource Conservation Districts (RCDs) for the westside of the County provide assistance to control soil erosion and runoff, stabilize soils, and protect water quality. At present, however, there is no RCD for much of the eastside of the County. Although portions of La Paloma and Ballico RCDs take in areas of the eastside, these two RCDs are headquartered in Merced County. Efforts currently are underway to establish one unified RCD for the entire eastside of Stanislaus County.

Implementation

- A. To encourage soil conservation, the Agricultural Commissioner and U.C. Cooperative Extension will continue to provide information on erosion control and soil management and will coordinate with soil conservation efforts of the Farm Bureau, the Soil Conservation Service, Resource Conservation Districts, and irrigation districts.

- B. Establishment of a Resource Conservation District for the eastside of the County will be encouraged.
- C. The Planning Department will continue to refer proposed developments whenever appropriate to Resource Conservation Districts and irrigation districts for their review and analysis of impacts on soil resources.

Responsible Agencies

- 1. Continue to provide soil management information and coordinate with soil conservation efforts of local, state and federal agencies--U.C. Cooperative Extension, Agricultural Commissioner
- 2. Encourage formation of a Resource Conservation District for the eastside of the County--Agricultural Advisory Board, Board of Supervisors
- 3. Continue to refer proposed developments to Resource Conservation Districts and irrigation districts--Planning Department



DEFINITIONS

Agricultural Land - Any land suited for agriculture.

Agricultural Uses - Land uses that are directly connected with or customarily incidental to agriculture.

Agriculture - The tilling of the soil, the raising of crops, horticulture, viticulture, small livestock farming, dairying, or animal husbandry, including all uses customarily incidental thereto but not including slaughterhouses, fertilizer yards, bone yards or plants for the reduction of animal matter or any other industrial use which is similarly objectionable because of noise, odor, smoke, dust or fumes.

Agricultural service establishment - A business engaging in activities designed to aid farmers in the tilling of soil, hauling of produce, or repair of farm equipment. Service does not include the provision of tangible goods except those sold directly to farmers and used specifically to aid in production of farm animals or crops. Nor does service include any business which has the primary function of manufacturing products.

Buffer - A physical separation such as a topographic feature, a substantial stand of trees, a water course or similar feature that serves to protect or insulate one type of land use from another.

Clustering - A development technique that involves the grouping together of residences and other structures in a relatively small area, as opposed to dispersing those structures over a larger area.

Farmland - The type of agricultural land best suited for growing crops. In this document, "farmland" is used synonymously with "agricultural land" to mean any land suited for agriculture.

Grazing Land - Land on which existing vegetation is suited for the grazing of livestock.

Non-Agricultural Uses - Land uses that are not directly connected with or customarily incidental to agriculture.

Remote Development - Development that takes place away from existing cities or urban centers.

Right-to-Farm Ordinance - Stanislaus County Ordinance Code, Section 9.32.010, Chapter 9. A local ordinance that protects the rights of farmers to carry on their "normal" agricultural practices with a decreased risk of nuisance lawsuits.

Rural - Characteristic of the country, as distinguished from city or town.

Setback - The distance between the nearest point of the building or structure and the right-of-way or easement borderline or property line.

Urban - Characteristic of the city, as distinguished from the country.

Urban Development - In incorporated areas, development that is served by both public water and public sewer services; in unincorporated areas, development that is served by public water and/or public sewer services.

Urbanization - The process of changing from rural to urban in character.

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Appendix A

ADDITIONAL AGRICULTURAL DATA

LOCATION

Stanislaus County is centrally located within the State of California. The County occupies a portion of the northern San Joaquin Valley, extending from the foothills of the Sierra Nevada to the ridge of the Diablo Range.

HISTORY

Prior to the Gold Rush, the fertile valley floor was a large prairie that served as home to large herds of elk and deer. Early agriculture consisted mainly of cattle raising. By 1880, the grasslands of the valley floor had been converted to dryland farming, and the area became one of the major grain producers of the world. As the area's population increased, irrigation was introduced and farming diversified.

CLIMATE

The climate of Stanislaus County is characterized by high daytime summer temperatures with 81 days reaching above 90° F. July is commonly the hottest month with an average maximum of 94.2° F. It is not uncommon that 25 days during July will surpass 90° F. During the winter, dense fogs often last for days. The winters are generally too cold for the commercial production of citrus fruits. However, the winter generally provides the requisite period of chilling for deciduous fruit. The absence of summer rains and light winter rains make it possible, with our warm, temperate weather, to grow peaches, tomatoes, alfalfa, grapes and many other crops.

Frost is another variable affecting the types of crops that may be grown. There are areas of Stanislaus County that are considered thermal or warm and safe for crops such as almonds.

West of Patterson and Newman and east of Oakdale, the temperatures are similar to the lowest portions of the valley floor except that the winter time lows are not quite as severe and commercial production of citrus can occur. A wide variety of field and vegetable crops can be grown here, as well as around Modesto and Turlock. Occasionally the area north of Modesto is affected by the marine air from the San Francisco Bay Area. These occasions are marked by slightly cooler evenings during the summer.

The average precipitation in the County is about 12 inches per year. December through March receive the bulk of the rainfall, often around two inches per month. The summers are normally very dry with almost no precipitation from June to September.

SOILS

Soils are formed by the forces of weather and organisms on parent materials (such as rocks or sediments). Then the physical action of rivers and streams carry and disperse the fragmented material as deposition. The resulting soils vary greatly depending on the climate, the number and kind of living organisms, relief and drainage characteristics. It is the combination of these forces that determine the make-up of any particular soil.

A small area of Stanislaus County has received the precise combination of parent materials and gradational forces to render a very rich, viable layer of agricultural soils. According to the USDA Land Capability System, of the total 973,440 acres in the County, less than 120,000 of the remaining agricultural land can be Class I soils. This roughly corresponds to the Storie Index rating of 80-100 (Grade I).

Stanislaus County can be geologically divided into what is commonly referred to as the eastside (approximately 2/3 of the area) and the westside (approximately 1/3 of the area). This dichotomy is based on the two predominant types of soils. The San Joaquin River forms a natural divider for these two types of soils.

Eastside

There are basically three soil types on the eastside of the San Joaquin River:

1. In the lower areas there are recent soils (1-5000 years) which tend to be deep, fairly uniform loams to sandy loams. These soils are derived from granite. There are some restrictive layers of compressed alluvial silts that inhibit rapid percolations.
2. The Montpelier, Woodward Reservoir and areas north of Oakdale are predominated by old terraced soils with some shallow cemented hardpans. These are commonly found in association with the low rolling hills of these areas. The hardpans are formed by aging, the leaching of clays, iron silicas and calcium materials and their solidification into rock-like pan. Those areas support chiefly dry land grains. With some soil modifications, vineyards and orchards can be grown very successfully.

3. The upland soils to the far eastern side of the County have developed upon rock strata. These are primarily the areas of cattle grazing. Present economic conditions generally do not permit other agricultural development. The underlying rock limits land leveling, grading and drainage.

Westside

All of the westside valley soils are of recent alluviums: loams, clay loams and clays washed out from the coastal range of mountains. These soils are different from eastside soils because the parent material is fine-grained sandstones and shales. As a result, these soils tend to be fine textured as opposed to the coarser soils of the eastside. The foothills of the west have parent rock very close to the surface. This, combined with sparse rainfall (9 to 11 inches annually), inhibits extensive grazing.

Sources: Soil Survey: Eastern Stanislaus Area (USDA, SCS, 1964), Environmental Resources Management Element: Soils (SAAG, 1974), and Soils of the Westside Stanislaus Area California (U.C. Davis, 1962).

LEADING COMMODITIES

According to the Stanislaus County Agricultural Commissioner's office, over 200 commodities were produced commercially in 1988. Many of those commodities are specialty crops produced almost exclusively in the Central Valley. Stanislaus County is the leading producer of walnuts, apricots, dry beans and chickens in the state.

Table 1 in the main body of this document shows the gross agricultural value of the leading commodities in Stanislaus County in 1988. Table A-1 shows the five-year summary of gross agricultural value for groups of commodities.

ECONOMIC IMPACT

Agriculture is the leading industry in Stanislaus County. In 1988, the County ranked eighth among California counties in the value of agricultural crops sold and, according to the last available U.S. Census of Agriculture data (1982), it ranked 13th among all agricultural counties in the United States.

With a gross agricultural income of over \$957 million in 1988, agriculture's total impact on our local economy totalled almost \$3 billion when its multiplier effect is taken into account. A large food processing, marketing and related service industry provides an economic multiplier effect estimated to be three to 11 times the raw product value, depending on the commodity. Table 2 in the main body of this document shows the 1991 value of leading commodities with multipliers.

A 1984 study by the University of California (Goldman) indicated about 1/3 of the jobs in Stanislaus County are generated by the agriculture and food processing sector of our economy. Table A-2 shows estimated economic impacts of agricultural commodity groups.

TABLE A-1

FIVE-YEAR SUMMARY OF GROSS AGRICULTURAL INCOME

(In Thousands of Dollars)

	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>
Field Crops	\$ 72,173	\$ 81,692	\$ 98,054	\$ 96,945	\$111,221
Seed Crops	1,853	1,801	1,571	2,051	3,770
Vegetable Crops	63,190	51,965	79,249	95,594	95,359
Fruit & Nut Crops	163,053	256,544	259,218	225,874	249,383
Nursery Products	13,326	17,062	19,696	19,189	18,639
Livestock & Poultry	195,856	190,033	182,848	201,296	230,725
Livestock & Poultry Products	277,419	278,364	269,065	318,055	323,897
Aquaculture					608
Apiary Products	<u>3,894</u>	<u>3,845</u>	<u>4,042</u>	<u>4,143</u>	<u>4,754</u>
TOTALS	\$790,764	\$881,306	\$913,743	\$963,147	\$1,038,356

SOURCE: Stanislaus County Annual Crop Reports

Table A-2

COMMODITY VALUES IN STANISLAUS COUNTY, 1984

<u>Commodity Group</u>	<u>Production Value</u> (mil \$)	<u>Added Value of Processing</u> (mil \$)	<u>Economic Impact Value</u> (mil \$)	<u>Increase in Regional Personal Income</u> (mil \$)	<u>Full-time Equivalent Jobs Created</u> (number)
Field Crops	89.4	27.8	246.7	80.1	1,950
Seed Crops	1.1	3.2	8.9	2.5	63
Vegetable Crops	48.3	404.6	989.2	307.1	9,519
Fruit & Nut Crops	180.8	456.1	1,437.2	580.8	15,619
Livestock	41.7	10.7	104.4	25.7	800
Poultry Products	217.9	152.5	733.8	148.8	6,365
Nursery Products	12.8	5.3	37.0	17.7	1,025
Dairy	<u>213.1</u>	<u>76.5</u>	<u>652.1</u>	<u>215.8</u>	<u>4,941</u>
TOTAL	805.1	1,136.7	4,209.3	1,378.5	40,282

Source: Dr. George Goldman, University of California Cooperative Extension

Food processing is a major sector of our local economy due to the availability of relatively inexpensive water and power, as well as the County's central location and proximity to major population centers in the state. Food processing activities include 7 bean warehouses, 7 canneries, 4 cheese processors, 1 chicken processor, 2 dehydrators, 16 egg processors, 2 freezers, 4 milk processors, 11 nut processors, 8 produce sheds, 1 squab processor, one turkey processor and 5 wineries. Agricultural support services such as equipment sales and repairs, veterinary services and seed supplies also play a major role in the economy, as do transportation and retail and wholesale trade.

FARM LABOR

During the last ten years, farm labor has stayed at a remarkably stable level. Table A-3 shows the farm labor force annual averages from 1977 to 1987.

Employment patterns in agriculture and some of the related industries are seasonal, with peaks occurring in the spring and fall.

Table A-3

ESTIMATED AGRICULTURAL EMPLOYMENT BY TYPE OF WORKER Annual Averages, Stanislaus County, 1977-1987

<u>Year</u>	<u>Total</u>	<u>Farmers and Unpaid Family</u>	<u>Total</u>	<u>(Hired)</u>	
				<u>Regular</u>	<u>Seasonal</u>
1977	9,870	4,040	5,830	2,860	2,970
1978	9,670	4,050	5,620	2,840	2,780
1979	8,630	3,480	5,150	2,650	2,500
1980	10,200	4,230	5,970	3,290	2,680
1981	11,410	5,480	5,930	2,380	3,550
1982	10,540	4,520	6,020	2,050	3,970
1983	10,480	4,500	5,980	2,050	3,930
1984	10,630	4,620	6,010	2,090	3,920
1985	10,430	4,610	5,820	2,080	3,740
1986	10,310	4,540	5,770	2,030	3,740
1987	10,300	4,540	5,760	2,030	3,730

Source: Employment Development Department, State of California

FARM LABOR HOUSING

There are two main providers of farm labor housing in the County--the Stanislaus County Housing Authority and the housing supplied by private farmers.

Privately provided housing for farm laborers is regulated by the state under the Employee Housing Act. When a farmer houses five or more employees, the housing facility is subject to this act. The County Department of Environmental Resources has assumed the responsibility of inspecting these facilities, or labor camps, to ensure that they are safe and sanitary. These camps are primarily for seasonal or temporary workers. In 1988 there were 16 camps operating legally in Stanislaus County. All but one of these camps were located west of Oakdale and Hughson, where more labor-intensive agriculture predominates.

The Stanislaus County Housing Authority manages and owns 577 separate units of either farm worker housing (permanent) or migrant housing (seasonal). There is a total of 356 farm-worker housing units, all of which are in Ceres, Patterson, Westley and Modesto. These permanent housing units are assisted and administered by Farmers Home Administration (FmHA). In Empire, Westley and Patterson the Housing Authority owns and operates a total of 221 migrant housing units. These are open from May through October only.

NUMBER AND SIZE OF FARMS

The U.S. Census Bureau, which conducts the national Census of Agriculture, defines a farm as any place where \$1,000 or more of agricultural products were produced and sold or normally would have been sold during the census year.

According to advance statistics from the 1987 Census of Agriculture, there were 4,630 farms in Stanislaus County in 1987. Total land in farms was 719,845 acres, compared with 807,199 acres in 1982. Also, the average size of farms dropped from 175 acres in 1982 to 155 acres in 1987. Only 232 farms were larger than 500 acres, and over 3,100 farms were smaller than 50 acres. Stanislaus County had the lowest average farm size in the San Joaquin Valley, suggesting that small family farms are still viable operations.

Of the total 4,630 farms in 1987, 2,735 were farms with sales of \$10,000 or more. Those farms averaged 230 acres, compared with 307 acres in 1982. Total land in farms with sales of \$10,000 or more was 629,358 acres, down from 747,710 acres in 1982. The reduction of land in farms reflects the trend toward urbanization in Stanislaus County.

OWNERSHIP PATTERNS

Agriculture in Stanislaus County is primarily a family business. Most farms are owned and operated by families. The quality of the land as well as the expertise of local farmers allow for economically viable farming on smaller parcels.

Parcel size distribution is as follows:

50 + acres	31%
10-50 acres	43%
1/2-10 acres	26%

LAND VALUES

The County's average value per acre has remained very stable over the last five years. The current average per acre is about \$2,900. Stanislaus County and San Joaquin County rank as having the highest value per acre in the San Joaquin Valley.

AGRICULTURAL SERVICES

Two main public agencies provide agricultural services at the local level: The University of California Cooperative Extension and the Stanislaus County Agricultural Commissioner's Office.

University of California Cooperative Extension

Stanislaus County Cooperative Extension is part of a nationwide system of off-campus education that brings the resources of County government, the University of California and the U.S. Department of Agriculture to the community. In terms of funding, the County contributed 17% of Cooperative Extension operating funds in 1987.

The agency has two main functions: problem solution (applied research) and disseminating information (education). Applied research is primarily accomplished through field trials with farmers. Education is accomplished through meetings, phone calls, on-farm consultations, publications, television and radio programs, newsletters and articles in newspapers and magazines.

Stanislaus County Cooperative Extension is currently conducting educational and

applied research programs in dairy, livestock, field crops, vegetable crops, fruit and nut crops, grapes, poultry, water management, environmental horticulture, farm personnel management, integrated pest management, 4-H and youth, consumer information, nutrition for disadvantaged people, community resource development, and informational assistance to "backyard gardeners," part-time farmers and the general public.

Agricultural Commissioner

The Office of the Stanislaus County Agricultural Commissioner and Sealer of Weights and Measures performs a variety of services to protect, enhance and promote agriculture, the environment and public safety.

The largest program conducted by the Agricultural Commissioner is pesticide use enforcement, which involves issuing use permits, making inspections, conducting investigations and hearings, and taking residue samples. The purpose of the program is to enforce state and federal pesticide regulations designed to protect people and the environment.

Other programs operating under the Agricultural Commissioner include fruit, vegetable and egg inspection to ensure quality produce; nursery and seed inspection to guard against diseases and inferior plants; pest exclusion to prevent crop-destroying pests from becoming established in California; and pest detection to find pests at the lowest population and in the smallest area possible in order to minimize the effects and costs of an eradication program.

Another division of the Agricultural Commissioner's office involves weights and measures inspections. This unit ensures that all weighing and measuring devices used in the selling of products are accurate. Staff also tests products to ensure that consumers are actually receiving what is labeled on a variety of commodities ranging from milk to gasoline.

U.S.D.A. Soil Conservation Service

The Soil Conservation Service (SCS) is a division of the U.S. Department of Agriculture providing technical services through Resource Conservation Districts to landowners, agriculturists, governmental agencies and others interested in protecting air, water and soil resources. The SCS provides technical assistance under the Annual Conservation Program (ACP), Long-term Agreement Program (LTA), Food Security Act Program (FSA) and numerous other activities related to conservation planning. RCDs conduct educational workshops and meetings within their jurisdictions and provide technical assistance under specific grant programs.

Appendix B

AIR QUALITY INFORMATION

The San Joaquin Valley is known world-wide for its agricultural bounty. It is part of California's agricultural heartland, where farmers collectively produce over \$8 billion in farm products per year. However, the State of California Air Resources Board estimates that smog caused crop losses in the San Joaquin Valley worth more than \$150 million 1987. As urban development continues throughout the valley, this damage will increase.

Stanislaus County is subject to the same factors that contribute to the degradation of air quality for the entire San Joaquin Valley:

1. The basin configuration of the valley is flat and bordered by mountains on the east and west.
2. There is generally insufficient wind, which contributes to the stagnation of air masses on the valley floor.
3. An air inversion commonly occurs, which acts as a lid of warm air that traps the cooler stagnant air in the valley.
4. More and more people are moving into the County, and smog is produced by the vehicles and factories that these people operate, by the chemicals and solvents they use, and by the industrial processes that occur with growth.

The County exceeds state and federal standards for three pollutants:

Ozone

Ozone does not come from a single source. Instead it is a product of a reaction that occurs when certain gases and chemicals mix in sunlight. Vehicles, factories and power plants give off the chemicals that lead to ozone. Because the reaction occurs in sunlight, ozone is primarily a summertime pollutant.

Fine Particles

These very small particles are ten microns or less. In the human body, fine particles irritate the lungs and may interfere with breathing. People with respiratory disorders are especially sensitive to fine particles.

Carbon Monoxide

Automobiles and trucks emit carbon monoxide. It is a colorless, odorless and poisonous gas that is harmful to lung and plant tissue. In large quantities it is lethal by restricting the oxygen that reaches the heart and brain.

Despite advances in auto emission control systems, motor vehicles are still the major cause of air pollution in Stanislaus County. Unlike ozone, carbon monoxide in the air is greater during the winter because of more incidences of stagnant air.

In 1987 Stanislaus County, along with the other eight counties of the San Joaquin Valley, embarked on a comprehensive air quality study. It is expected to be completed by about 1994 and is intended to collect data and utilize the most advanced techniques to control this increasing problem.

Appendix C

The appendix below is reprinted from The Impacts of Farmland Conversion in California, a study by Jones & Stokes Associates, Inc., for the California Department of Conservation (1991). In the report, the appendix is suggested as an addition to State CEQA guidelines for assessing impacts of farmland conversion. As stated in the section of the Agricultural Element on Assessing and Mitigating the Impacts of Farmland Conversion, Stanislaus County will adopt a similar appendix as an addition to its own CEQA guidelines. The guidelines are intended to assist reviewers and preparers of EIRs in assessing the impacts of farmland conversion, including the kinds of impacts to be considered and the types of analyses to be undertaken.

Appendix L: Agricultural Impacts

I. Introduction

Projects involving changes in land use sometimes convert agricultural lands to nonagricultural uses. Conserving productive agricultural lands requires a careful project-specific evaluation of the direct and indirect effects, as well as the cumulative effects, of agricultural land conversion. The following sections provide a checklist of items that should be considered by preparers analyzing projects involving land conversion and those reviewing such EIRs.

II. Project Description

The project description should include the following items when applicable:

- number of acres of agricultural land that would be converted and number of acres that would remain in agricultural use and
- proposed schedule for termination of farming and a description of interim agricultural use.

III. Environmental Setting

The setting should describe both the regional and site-specific characteristics of affected agricultural resources, including the following items:

- description of the historic and current agricultural uses of the project site and its general vicinity, including crops produced over the recent past (up to 5 years), current number of acres under production, current crop mix, and typical crop yields;
- identification and proposed disposition of onsite improvements for agricultural production, including farming-related buildings, wells, irrigation facilities, and drainage facilities;
- identification of the current landowner, the current landowner's tenure, and length of time the project site has been farmed;
- description of onsite soil types, classifications, and potential agricultural productivity of soils based on U.S. Department of Agriculture soil surveys and California Department of Conservation Important Farmland Maps;
- general discussion of agricultural production within the local jurisdiction, including amount of land under cultivation, number of acres under Williamson Act contracts, important crops, value of agricultural production, and number of jobs associated with agricultural production, agricultural services, and processing of food and food products;
- description of trends in farmland conversion in the County;
- discussion of the contribution the project site makes to the agricultural base of the community and County, including the number of agricultural jobs supported by the onsite agricultural operation and the contribution of onsite production to total production within the community or County;
- description of surrounding land uses, including soil classes and crop mixes;
- description of farming practices, including pesticide applications, on the project site and on adjacent lands;

- identification of onsite parcels and nearby parcels under Williamson Act contracts, and a discussion of the status of these contracts; and
- description of applicable general and specific plan elements, ordinances, and other policies related to agriculture and their relationship to the proposed project.

IV. Environmental Impacts

The Lead Agency should consider all significant agricultural impacts that could result from proposed projects. Such impact include direct, indirect, growth-inducing, and cumulative impacts.

A. Direct Impacts

1. Significant impacts on the physical environment need to be considered, including:
 - irreversible land use change;
 - destruction or fragmentation of native ecological communities;
 - loss of nesting or foraging habitat for wildlife;
 - adverse impacts on endangered or rare species;
 - impediments to normal wildlife migration patterns;
 - reductions in the availability or reliability of water supplies
 - loss of beneficial uses of water; and
 - increased emissions of atmospheric pollutants including reactive organic gases, carbon monoxide, oxides of nitrogen, oxides of sulfur, and particulate matter.

2. Economic or social impacts of a project may be assessed to identify physical changes caused by the project or evaluate their significance. Included among the potential direct economic and social impacts of projects involving agricultural land conversion are effects on the viability of neighboring agricultural operations and exposure of the public to increased health risks or nuisances. Examples include:
 - reduced agricultural yields resulting from increased air pollution, pest infestations resulting from off-farm practices, or livestock predation by pets;
 - reduced profitability of farming resulting from increased incidences of theft, vandalism, road congestion, or personal injury liability;
 - reduced profitability of farming resulting from increased farmland costs;
 - increased exposure of human population to pesticides, fertilizers, dust, odors, and light and glare resulting from normal farming operations; and
 - loss of food production capacity, primarily for crops that require unique growing conditions.
3. Institutional impacts relating to farmland protection and land use should be considered, including:
 - nonrenewal or cancellation of Williamson Act contracts,
 - changes in land use designations of local general plans, and
 - changes in the boundaries of the spheres of influence of one or more cities.

B. Indirect Impacts

Potential indirect impacts of projects resulting in agricultural land conversions include other reductions in regional output, personal income, and employment induced by reduced crop or livestock production on the project site. Reduced production is of particular concern in areas where farming and related industries are a major sector of the regional economy. Such impacts should be quantified if possible using input-output multipliers or other appropriate analytical approaches.

C. Cumulative Impacts

A cumulative impact is the change in the environment resulting from the incremental impact of the project when combined with other closely related past, present, and reasonably foreseeable future projects. Potential cumulative impacts of agricultural land conversion include:

- reduced food production capacity;
- losses of unique farmlands or the capability to produce the maximum possible diversity of crops;
- reduced viability of regional agriculture-related industries such as farm equipment manufacturing and sales, farming services, and food processing resulting from decreased agricultural activity and output;
- adoption of ordinances or other policies that restrict farming operations;
- reductions in air quality in state or federal nonattainment areas for specific emissions or in other areas where air quality may be near a threshold beyond which an increased human health hazard would result; and
- reductions in water quality in areas where groundwater or surface water is of marginal quality to support specified beneficial uses.

D. Growth-Inducing Impacts

Growth-induced by a project could result in further farmland conversions. Growth inducement effects are closely related to the direct economic effects of agricultural land conversion, and may be analyzed in that context. Examples include:

- increased production costs on surrounding farmlands resulting from increased theft, vandalism, personal injury liability, road congestion, water costs, or land costs;
- decreased crop yields on surrounding farmlands resulting from restrictions on pesticide use near urban areas, requirements to establish on-farm buffer zones, increased incidence of crop diseases caused by inadequate care of urban ornamental or landscape plants, or increased emissions of air pollutants;
- impacts on agricultural land prices resulting from additional growth induced by the project (e.g., commercial development supported by onsite residential development); and
- effects that a Williamson Act contract cancellation may have on other Williamson Act contracts.

V. Mitigation Measures

Measures to mitigate the impacts of agricultural land conversion should be evaluated for effectiveness and feasibility, and appropriate measures should be recommended in the EIR. Generally, mitigation measures can avoid, minimize, or compensate for impacts. For example, mitigation measures could:

- avoid the impact by proposing alternative sites with less productive soils, less intensive agricultural uses, less valuable agricultural improvements, or less potential for land use conflicts;
- minimize direct impacts by reducing the amount of agricultural land converted to nonagricultural uses, by increasing urban land use densities, or by retaining onsite agricultural uses;
- minimize indirect impacts on adjacent agricultural lands by
 - adopting a right-to-farm ordinance,
 - requiring onsite buffers or greenbelts between urban and agricultural uses, or
 - restricting the intensity of residential uses adjacent to agricultural lands; or
 - compensate for the impact by

- enrolling under a Williamson Act contract productive offsite agricultural land not currently under contract,
- protecting productive offsite agricultural land subject to conversion through the purchase or transfer of its development rights, or
- making agricultural improvements on agricultural land or on non-farmland suitable for farming.

VI. Alternatives

In addition to the No-Project Alternative, other alternatives may be able to reduce or avoid the impacts of agricultural land conversion. Offsite alternatives should be considered for the project when suitable sites with less productive soils are available within the market area. Onsite alternatives that would reduce the amount or quality of land converted, or would reduce potential conflicts with adjacent land, should be considered.

VII. Short-Term Versus Long-Term Productivity

The project's potential to achieve short-term goals to the disadvantage of long-term environmental goals needs to be considered. A trade-off of this kind could occur, for example, if agricultural land were proposed for a mineral extraction operation expected to have a relatively short operating lifetime, and the long-term productivity of the site were to be degraded.

VIII. Organizations to Consult Regarding Projects Involving Agricultural Land Conversion

The following organizations should be consulted to obtain information relevant to analyzing the impacts of agricultural land conversion:

- U.S. Soil Conservation Services (local office);
- California Department of Conservation, Office of Land Conservation;
- California Department of Food and Agriculture;

- California Department of Water Resources, Water Conservation Section, Land Use Mapping Division (district office);
- California Department of Finance;
- California Employment Development Department;
- University of California Cooperative Extension (local office);
- California Coastal Commission (if project is located in the coastal zone); and
- The County Agricultural Commissioner's office or County Department of Agriculture.

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